

# CADE

## Cost Assessment Data Enterprise

Defense Cost and Resource Center (DCARC)

**Cost and Software Data Reports (CSDRs)  
Industry and Government Training  
Washington, DC**

CAPE

COST ASSESSMENT & PROGRAM EVALUATION

**Last Updated: December 2, 2015**



# Track: Training - Course Outline

OSD CAPE

## AGENDA

- CSDR 101
- CSDR Planning
- “CADEPardy”
- CSDR Validation Process & Demo
- CADE Demo
- Round Table Discussion
- Summary, Questions, and Wrap up

## By the end of the training, you will understand:

How CADE improves productivity

CADE tools & processes, and how you fit into the process

The importance of CSDRs

The CSDR Planning and CSDR validation Process and Procedures

How to avoid common planning and Reporting pitfalls

- ☐ Be able to explain the utility of CSDRs
- ☐ Improve data quality through CSDR planning
- ☐ Successfully submit a report to the DCARC



# CSDR 101



# CADE Authoritative Data Sources

OSD CAPE



Cost Assessment Data Enterprise



Acquisition

- Quantity
- Funding Schedule

DAMIR

SARs  
DAES

ARA

Earned Value

DACIMS

- SRDRs
- Cost Schedule
- CCDRs

EVM-CR

IPMRs  
CPRs

PARCA

**CADE**

About CADE, Request Access

**CSDR**

DCARC, DACIMS Policy, Info

**EVM**

EVM-CR, Policy, Info

**CADE**

About CADE, Request Access

# CADE Total Access Dashboard

Dashboard  
default viewSite-Level  
NavigationContextual Help  
and FeedbackProgram-specific  
dataImmediate access  
to Favorite  
ProgramsShortcuts to  
related  
information

OSD CAPE

Knowledge Portal

DCAP CAPE

CADE PORTAL CONTENT MANAGEMENT SEARCH PROGRAMS **DASHBOARD** RETRIEVE FILES TOOLS REPORTS CONTACT US

Test User \* Please close this window to log out \*

Program: USS Voyager ★ My Favorite Programs

Program-Level EVM CSDR O & S

USS Voyager

Service	Program Group	ACAT Category	Latest SAR	Acq Cost (\$M)	Quantity
AIR FORCE	MDAP	ID	Dec 2010	161,969.2	179

**Acquisition Cost and Quantity Estimate Across SAR Submissions**  
(Datasource - DAMIR)

**Time-Phased Acquisition Costs and Quantity**  
Dec-2010 SAR  
(Datasource - DAMIR)

**Program Contracts and Data Availability**

Contract Number	Phase	Prime/Sub	Prime Contractor	Service	Contract Type	EVM Efforts	CSDR Plans *	
007-4150-7996-006-024	SDD	Prime	The Academy	AIR FORCE	FFP	2	1	▼
NCCC06-01-D-74656	LRIP/PROD	Prime	The Academy	AIR FORCE	CPIF/FFP/PPAF	1	1	▼
DAAA06-10-C-0095	LRIP/PROD	Prime	The Academy	AIR FORCE	CPIF/FFP/PPAF	2	1	▼

**USS Voyager**  
Program Funding as of Dec 2010 SAR

RDTE(TY\$):	32,423.4M
Procurement(TY\$):	34,237.0M
Milcon(TY\$):	676.6M
Units:	179

[View Funding Detail](#)

**Milestones**  
Program Milestones from DAMIR

Milestone	APB Obj.	APB Thres	Current
IOC	Jan 2014	Jul 2014	Apr 2014
IOT&E USSV 2	Dec 2013	Jun 2014	Aug 2015

[View and Plot Milestones](#)

**Key Events**  
Key Events list maintained by community

- Aug 2010 - Warp Drive Sub
- Jan 2007 - Intrepid Award
- Jun 2008 - PDR Actual
- Jul 2009 - CDR

[View and Plot Key Events](#)

**Community Knowledge**  
Share information related to this program

- VD Test User shared a note. 3/23/2015
- VD Test User shared a file. 3/23/2015
- VD Test User shared a link. 3/23/2015
- VD Test User shared a file. 3/23/2015

[View Community Knowledge](#)

**CCRL Search**  
[Open CCRL website in a new tab](#)

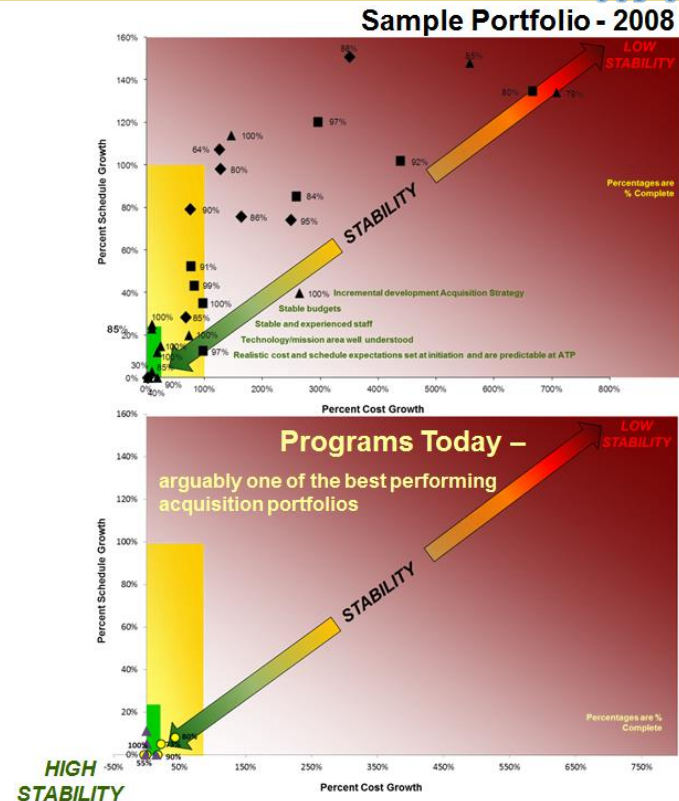
The Collaborative Cost Research Library is an online document library that contains over 16,000 cost research files contributed by the services and support contractors. Search among these documents here.

[Search CCRL Documents](#)

## OSD CAPE



- **Quality:** Authoritative Quality Data means more time for analysis; less time collecting data.
- **Completeness:** Integrated data enables comprehensive assessments; less burden on industry
- **Availability:** Near real-time access to data
- **Transparency:** Authoritative Source data also increases confidence in results



- **Standardized:** Standardized data collection supports standardized analysis
- **Cost Realism:** Fundamental to preparing credible cost estimates
- **Institutional Knowledge:** Effective tool to retain historical knowledge and turn data into information
- **Budget Preparation:** Used to assess the adequacy of budgets and program plans



# THE CADE EFFECT ON THE COST COMMUNITY

## Why We Need This Data:

OSD CAPE

### CADE Integration Across the Community



### COST COMMUNITY COORDINATION:

- Revolutionizing Cost Data collection
- Cost Community has Requirements, Leadership, & Operational Responsibility
- Common Terminology has created the ability to estimate across Departments

### IMPROVED ACQUISITION OUTCOMES:

- **Authoritative Quality Data:** Cooperative Planning and Compliance lead to better data and improved program management
- **Cost Realism:** Provide real-time cost data for analysis & contract negotiations
- **Full view of Weapons Systems Program Performance:** Visual analytics, trend analysis & technical data to improve cost realism and make informed decisions

### EFFICIENT AND EFFECTIVE ANALYSIS:

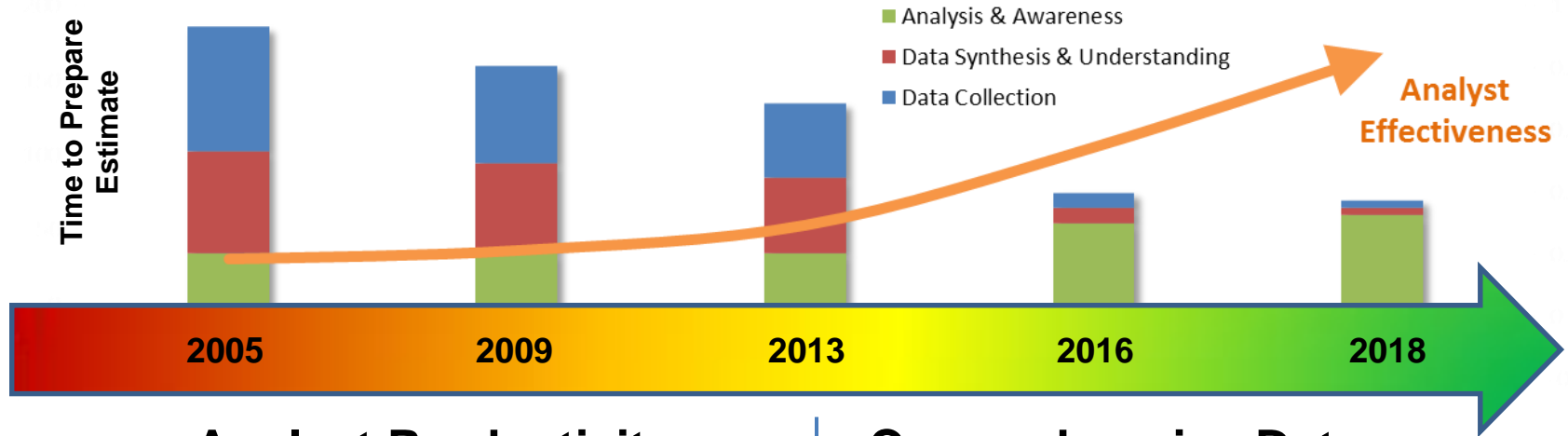
(at all levels: OSD, Services, PMOs)

- Improved Analytical Rigor & Productivity
- More time for analysis; less time collecting data
- More comprehensive assessments & Reduced burden on Industry



# Why Should You Care – More Efficient and Effective Analysis

OSD CAPE



## Improve Analyst Productivity:

- Less burden on analyst to retrieve and process data
- Become familiar with programs more quickly
- Complete analysis facilitates telling the program's "story"

## Comprehensive Data:

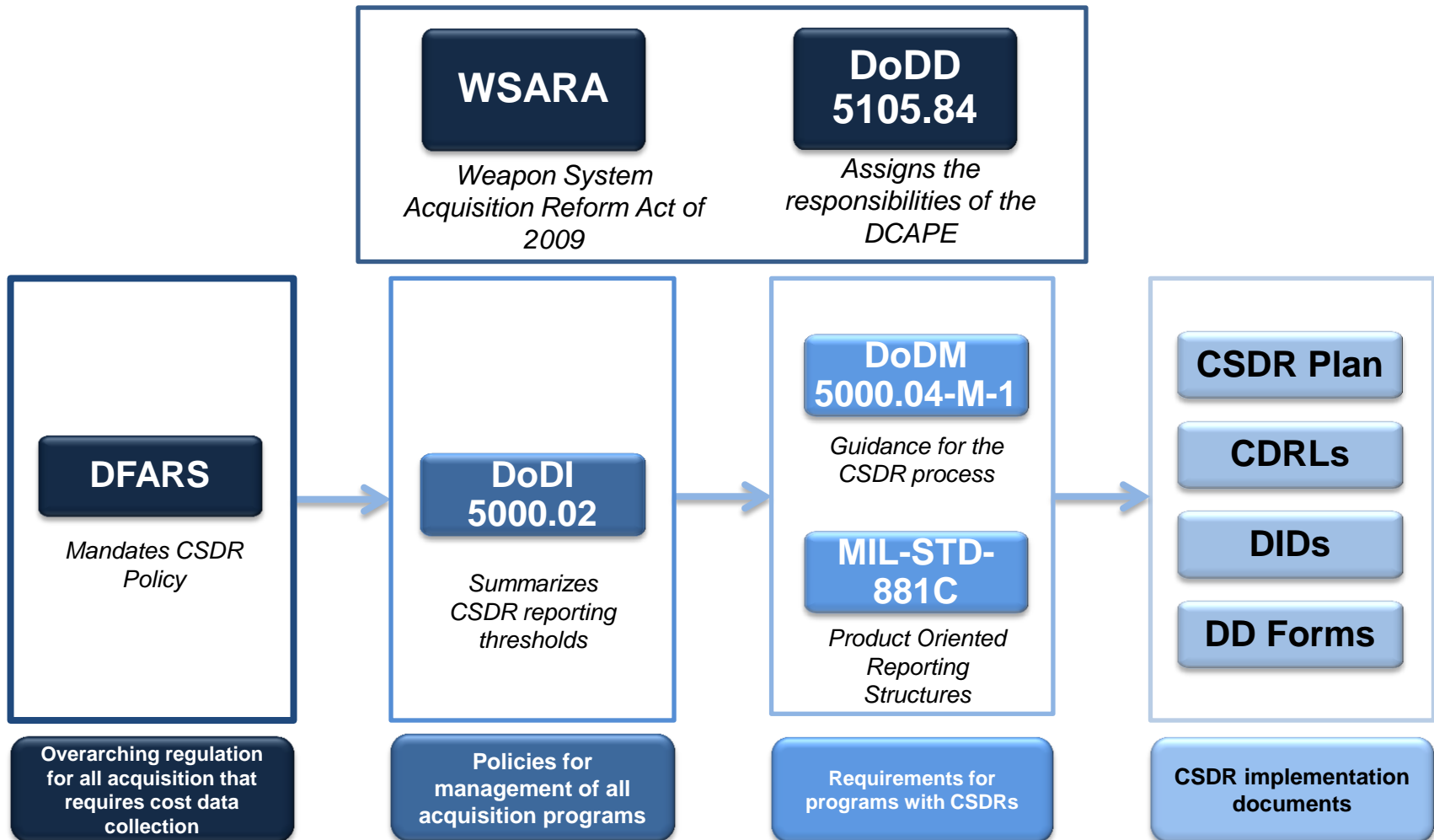
- Improved Planning and Compliance lead to better data
- "One-stop shop" for Cost, EVM, Programmatic, and Technical
- Centralized virtual library includes CARDS and ICEs

Cost analysts will have data and institutional knowledge at their fingertips. It will be the exception – not the rule – that we have to go back to Industry to do our estimates



# Why Should You Comply?

OSD CAPE



**Systematic cost data collection is necessary for program stability**



# CADE Authoritative Data Sources

OSD CAPE



Cost Assessment Data Enterprise



Google™ Custom Search

**CADE**

About CADE, Request Access

**CSDR**

DCARC, DACIMS Policy, Info

**EVM**

EVM-CR, Policy, Info

# EVM-CR – The EVM Engine

OSD CAPE

Access point to the EVM-CR (Either a CAC or ECA Certificate is required)

## EVM-CR Earned Value Central Repository

PARCA PERFORMANCE ASSESSMENTS AND ROOT CAUSE ANALYSES

Enhancing DoD Cost Analysis

Home

Contact Us

### DCARC Portal

#### Portal Login

Access to EVM-CR, Visual Display

[Request Portal Access](#)

[Registration Instructions](#)

EVM-CR Overview

EVM Tools

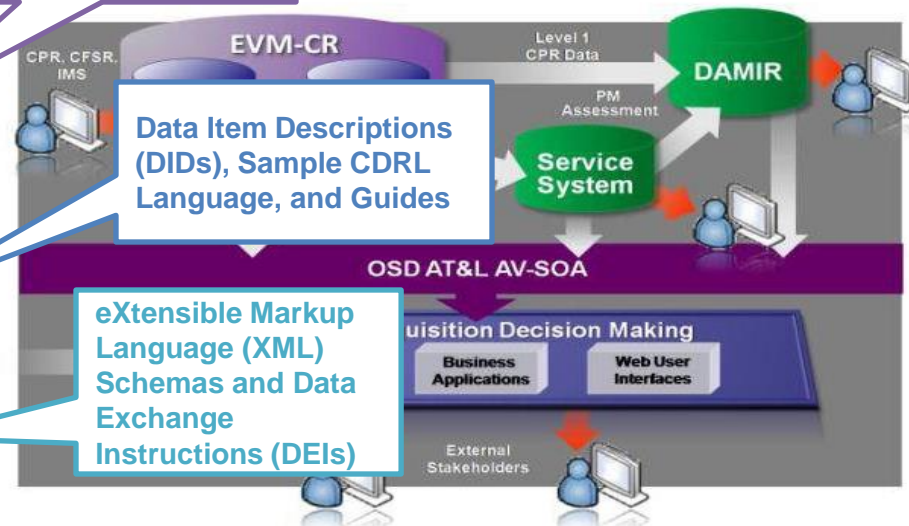
Documentation

UN/CEFACT XML

Viewers for Contract Performance Report (CPR) and Integrated Master Schedule (IMS files)

Data Item Descriptions (DIDs), Sample CDRL Language, and Guides

eXtensible Markup Language (XML) Schemas and Data Exchange Instructions (DEIs)



Tools for EVM success are available at <http://cade.osd.mil/EVM/>



# CADE Authoritative Data Sources

OSD CADE

The screenshot shows the homepage of the Cost Assessment Data Enterprise (CADE) website. The header is dark blue with the Department of Defense seal on the left, the text "Cost Assessment Data Enterprise" in the center, and the CADE logo on the right. The main banner features a collage of military images (fighter jets, helicopters, soldiers) with a large, semi-transparent CADE logo in the center. Below the banner is a Google Custom Search bar. At the bottom, there are three columns of links: "CADE About CADE, Request Access", "CSDR DCARC, DACIMS Policy, Info", and "EVM EVM-CR, Policy, Info".

Cost Assessment Data Enterprise

CADE

Cost Assessment Data Enterprise

Google™ Custom Search

**CADE**  
About CADE, Request Access

**CSDR**  
DCARC, DACIMS Policy, Info

**EVM**  
EVM-CR, Policy, Info

# DCARC – The CSDR “Engine”

**Defense Cost and Resource Center**

**Home**

**DCARC Portal**

**Portal Login**

Access to DACIMS, CSDR-SR, cPetWeb, 1921-3 & FPR  
[Request Portal Access](#)  
[Registration Instructions](#)

**eRoom Login**

Access to Plan Development Forum  
[Request eRoom Access](#)

Access point to the CSDR-SR (Either a CAC or ECA Certificate is required)

**DCARC**

**Effective July 1st, 2014**

all submissions of **Cost Data Summary Reports** (DD Form 1921), **Functional Cost-Hour Reports** (DD Form 1921-1), and **Progress Curve Reports** (DD Form 1921-2), under the May 2011 Data Item Descriptions, are required to submit Extensible Markup Language (XML) files and Excel-compatible files to the CSDR.

... The XML files can be generated automatically from the Excel-compatible files (or vice versa) with DCARC's cPet software tool.

Still having trouble? Send us an email

**Training & Events**

**Contact Us**

**Cost Data Summary Reports**

For information on the XML requirements:  
 To view the XML Implementation Manual  
 To locate the DCARC's standard XML files  
 For information on submitting cost data

**CSDR Plan implementation documents to assist you in the planning process (Analysts)**

**CSDR reporting documents to ensure proper reporting practices (Data Providers)**

**Tools for CSDR plan and form generation. \*GENERATES XML FORMATS (Analysts and Data Providers)**

**Data repository containing 48,144 reports as of December 2015, on 410 MDAP programs**

**CSDR Overview and Policy**

- Introduction and Timeline
- DODI 5000.02
- CSDR Manual
- CSDR Requirements
- Defense Federal Acquisition Regulations Supplement (DFARS)
- WBS - MIL-STD-881C
- Operating and Support Cost Estimating Guide

**Plan Development and Contracting**

- WBS - MIL-STD-881C
- Planning Forms, RDT, and Instructions
- CSDR Post-Award Meeting Procedures
- RFP Language
- CDRL Examples
- cPet Application - Plan Development
- Supporting Documentation Checklist

**CSDR Forms and Reporting**

- DIDs and Reporting Forms
- Validation Process
- cPet Application - Cost Reporting and Validation
- CSDR Submit & Review Website

**Systems and Applications**

- CSDR Planning and Execution Tool (cPet)
- CSDR Submit & Review Website

**DACIMS**

- Defense Automated Cost Information Management System (DACIMS)

All policy documents are available for you to verify if this requirement applies to your program. (Program Offices)

Tools for CSDR success are available at <http://cade.osd.mil/CSDR/>



# What are Cost and Software Data Reports? (CSDRs)

OSD CAPE



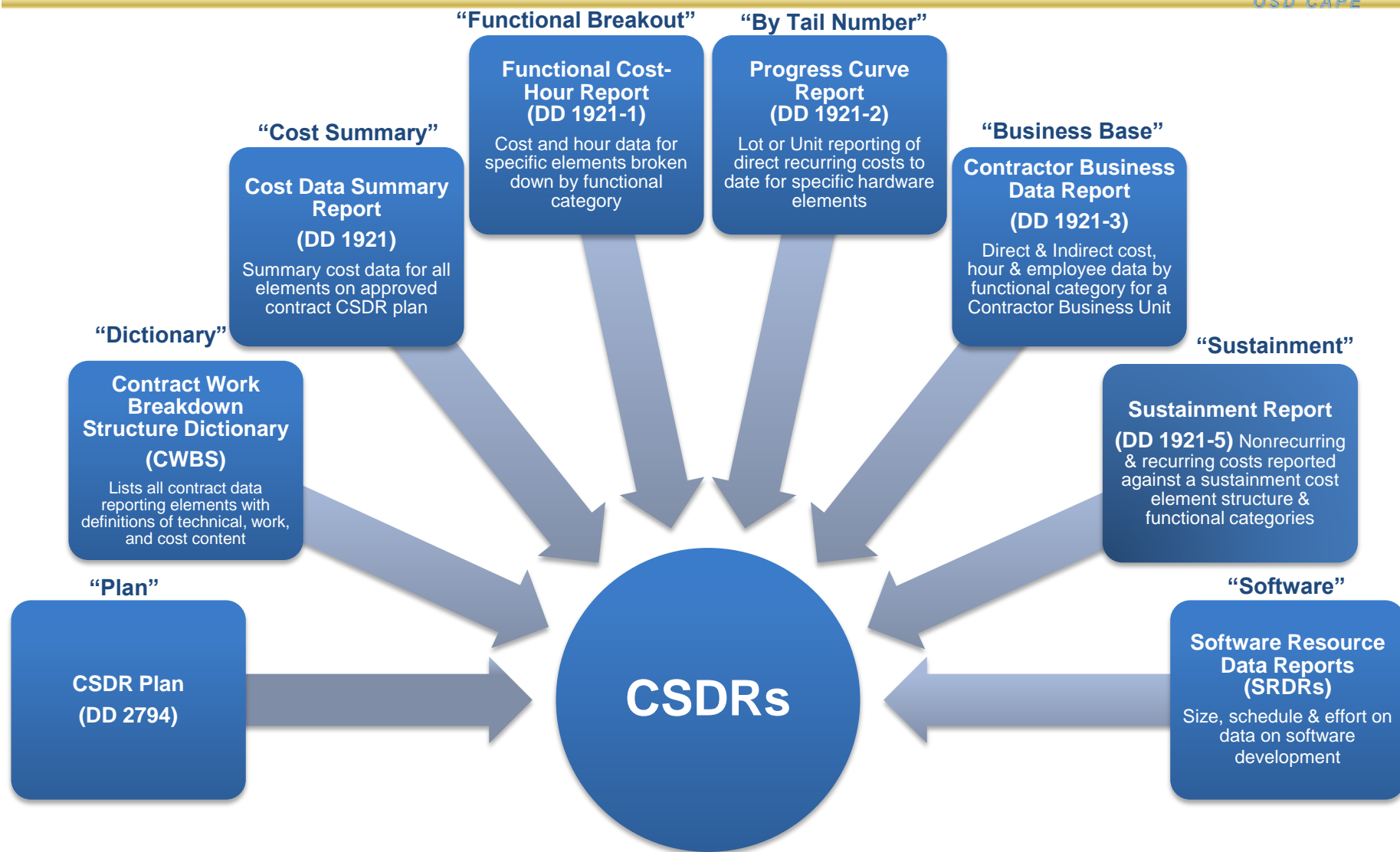
- ❑ **Organized via a standard, product-oriented WBS**
- ❑ **Reporting required on MDAP/MAIS contracts and subcontracts**
  - Over \$50M
  - Optional between \$20M and \$50M
  - ACAT II & III Programs (demand from services)
- ❑ **Helps us project future program & contract costs**
- ❑ **Available to all DoD Government analysts electronically**



# Types of CSDRs



OSD CAPE



## CSDR Data We Collect Today

# CSDR Plan

## DD Form 2794

UNCLASSIFIED



OSD CAPE

### CSDR Plan

Defines WBS used for CSDR submissions

Identifies required reports

Lists Submission Events and expected due dates

Contains Standard Plan Language and Special Contractor Instructions

COST AND SOFTWARE DATA REPORTING PLAN						Form Approved OMB No. 0704-0188	
<p>The public reporting burden for this collection of information is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p> <p><b>PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.</b></p>							
<b>1. MAJOR PROGRAM</b> a. NAME: b. PHASE/MILESTONE <input type="checkbox"/> Pre-A <input type="checkbox"/> B <input type="checkbox"/> C-FRP <input type="checkbox"/> C-LRIP <input type="checkbox"/> O&S			<b>c. PRIME MISSION PRODUCT</b> <b>Metadata</b>		<b>2. WBS SYSTEM TYPE</b>		<b>3. SUBMISSION TYPE</b> <input type="checkbox"/> INITIAL <input type="checkbox"/> CHANGE
<b>4. CURRENT SUBMISSION DATE</b> (YYYYMMDD)			<b>5. LAST APPROVED PLAN DATE</b> (YYYYMMDD)				
<b>6a. POINT OF CONTACT (POC) NAME AND ADDRESS</b> (Include ZIP Code)			<b>6b. TELEPHONE NUMBER</b> (Include Area Code)		<b>6c. FAX NUMBER</b> (Include Area Code)		<b>6d. E-MAIL ADDRESS</b>
<b>7. PLAN TYPE</b> <input type="checkbox"/> PROGRAM <input type="checkbox"/> CONTRACT (PRIME) <input type="checkbox"/> CONTRACT (SUB)		<b>8. PREPARING ORGANIZATION</b>		<b>9a. CONTRACTOR NAME/ADDRESS</b> i. PERFORMING ORGANIZATION ii. DIVISION		<b>9b. CONTRACT NUMBER</b>	
<b>9c. APPROPRIATION</b> <input type="checkbox"/> RDT&E <input type="checkbox"/> PROCUREMENT <input type="checkbox"/> O&M		<b>10. APPROVED PLAN NUMBER</b>					
<b>11. WBS ELEMENT CODE</b> a. PROGRAM/CONTRACT/SUBCONTRACT b. CONTRACT/SUBCONTRACT		<b>12. WBS REPORTING ELEMENTS</b> <b>Element Code and Reporting Elements</b>				<b>13. REPORTS REQUIRED</b> (X if applicable) DD 1921-3 (CBDR): <input type="checkbox"/> a. CWBS DICTIONARY b. DD 1921 (CDSR) c. DD 1921-1 (FCHR) d. DD 1921-2 (PCR) e. DD 1921-4 (CSR) f. SRDR FORMATS <b>Required Reports</b>	
<b>14. CSDR SUBMISSION DATES</b> a. SUBMISSION b. FORM(S) c. EVENT d. AS OF DATE (YYYYMMDD) e. DUE DATE (YYYYMMDD) <b>Submission Events</b>							
<b>15. REMARKS</b> <b>Contract Plan Language and Special Instructions</b>							

DD FORM 2794, MAY 2011

DD FORM 2794 (PAGE 2), MAY 2011

PREVIOUS EDITION IS OBSOLETE

# CWBS Dictionary



OSD CAPE

## CWBS Dictionary

Provides definitions for all WBS elements

Cost, technical and work content included in definitions

Physical description for all hardware elements

Metadata						Contract Work Breakdown Structure Dictionary	Program: P-49 Phoenix Fighter	RFP No: XXXXX	Contract Plan No.: A-10-X-C1
								Contract No: DAAE07-XX-E-0001	Date: 9/26/2012
								Point of Contact: Erin Bell, (310) 555-9461, ebell@company.com	
Element Codes	CWBS ELEMENT LEVEL					CWBS ELEMENT NAME	CWBS DEFINITION		
	CWBS CODE	1	2	3	4	5			
		Element Levels					Element Names		
	1.0	X					P-49 Phoenix Fighter		
	1.1		X				Air Vehicle		
	1.1.1			X			Airframe		
	1.1.2			X			Propulsion		
	1.1.3			X			Vehicle Subsystems		
	1.1.4			X			Avionics		
	1.1.5			X			Armament/Weapons Delivery		
	1.1.6			X			Auxiliary Equipment		
	1.1.7			X			Furnishings and Equipment		
	1.1.8			X			Air Vehicle Software		
	1.1.9			X			Air Vehicle Integration, Assembly, Test, and Checkout		
	1.2		X				Systems Engineering		
	1.3		X				Program Management		
	1.4		X				System Test and Evaluation		
	1.5		X				Training		
	1.6		X				Data		
	1.7		X				Peculiar Support Equipment		
	1.8		X				Common Support Equipment		
	1.9		X				Operational/Site Activation		
	1.10		X				Industrial Facilities		
	1.11		X				Initial Spares & Repair Parts		
							This WBS element includes the cost of the P-49 Phoenix Fighter in addition to the cost of the common WBS elements. The P-49 Phoenix Fighter is an Army aircraft developed to conduct anti-submarine warfare. This WBS element reports the total production cost, includes all design, development, production, and procurement efforts associated with the total complement of equipment, software, services, facilities, and integrated logistics support that are necessary to deliver and maintain the aircraft, through the cost for the common WBS elements. WBS element 1.1 Air Vehicle captures the cost of the product, while WBS elements 1.3 through 1.1.1 capture the cost of the "common elements".		
						The air vehicle element includes design, production, material and equipment procurements including associated vendor design/development efforts to provide for a functionally integrated air vehicle including installation of engines and avionics and all contractor vendor design to provide the fuselage, canopy assembly, and access doors. The makeup of the air frame is comprised of steel and composite metals including aluminum alloys. This element includes the basic structure including the wings, fuselage, empennage, and nacelle.			
						The propulsion system incorporates the X-5231 engine. The engine is started by firing the initiator by command by the Missile Control Unit. The initiator is connected to the engine start cartridge and the igniter cartridge. The start cartridge produces high pressure gasses which impinge on a turbine, thereby spinning the engine up to starting speed.			
						The vehicle subsystems includes design, production, material and equipment procurements including associated vendor design/development efforts to provide for the Auxiliary Power Unit, Airframe Mounted Accessory Drive, Air Turbine Starter, oil cooling lines. The equipments perform engine starting on the ground, emergency starting during flight, ground checkout operations of aircraft accessories, and power takeoff for hydraulic pumps and electrical generator system and fuel motive flow pumps.			
						The avionics includes the X-1PY radar, radar altimeter, direction finding set, doppler compass, computer. The contractor is procuring this item from a supplier, and is also completing tests upon delivery.			
						This WBS element is not applicable to this contract.			
						This WBS element is not applicable to this contract.			
						This WBS element is not applicable to this contract.			
						This WBS element is not applicable to this contract.			
						The air vehicle integration, assembly, test and checkout is conducted by the contractor at the contractor's site. It includes load analysis, stress analysis, and maintenance effort. Also included is the joining and instalation of all third level WBS elements into the air vehicle, as well as final acceptance testing. All work is being conducted by the contractor at the contractor's facilities.			
						This WBS element is not applicable to this contract.			
						Program management includes the contractor's efforts to perform tasks required for planning and control of program schedules, cost and technicia performance including WBS maintenance, work authorizations, budgeting and data reporting. Also included is management and maintenance of the requirements database.			
						This WBS element is not applicable to this contract.			
						This WBS element is not applicable to this contract.			
						This WBS element is not applicable to this contract.			
						This WBS element is not applicable to this contract.			
						This WBS element is not applicable to this contract.			
						This WBS element is not applicable to this contract.			
						This WBS element is not applicable to this contract.			

Technical, Work, and Cost Content Definitions

# Cost Data Summary Report

## DD Form 1921

UNCLASSIFIED



OSD CAPE

DD 1921

Displays ALL  
WBS elements

Recurring &  
Nonrecurring  
costs

Actual costs to  
date, estimates  
at completion

Number of  
Units

Contract  
Totals

G&A, FCCM,  
UB, MR, and  
Fee

SECURITY CLASSIFICATION <u>Unclassified</u>																																			
COST DATA SUMMARY REPORT									Form Approved OMB No. 0704-0188																										
<p>The public reporting burden for this collection of information is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p> <p><b>PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.</b></p>																																			
1. MAJOR PROGRAM		a. NAME:		2. PRIME MISSION PRODUCT		3. REPORTING ORGANIZATION TYPE		4. NAME/ADDRESS (Include ZIP Code)		5. APPROVED PLAN NUMBER																									
<input type="checkbox"/> Pre-A <input type="checkbox"/> B <input type="checkbox"/> C-FRP <input type="checkbox"/> A <input type="checkbox"/> C-LRP <input type="checkbox"/> O&S						<input type="checkbox"/> PRIME / ASSOCIATE CONTRACTOR <input type="checkbox"/> DIRECT-REPORTING SUBCONTRACTOR <input type="checkbox"/> GOVERNMENT		a. PERFORMING ORGANIZATION b. DIVISION																											
6. CUSTOMER (Direct-reporting subcontractor use only)		7. CONTRACT TYPE		8. CONTRACT PRICE		9. CONTRACT CEILING		10. TYPE ACTION																											
								a. CONTRACT NO.: b. LATEST MODIFICATION: c. SOLICITATION NO.: d. NAME:		e. TASK ORDER/DELIVERY ORDER/LOT NO.: 15. RESUBMISSION NUMBER																									
11. PERIOD OF PERFORMANCE				12. APPROPRIATION		13. REPORT CYCLE		14. SUBMISSION NUMBER		16. REPORT AS OF (YYYYMMDD)																									
a. START DATE (YYYYMMDD): b. END DATE (YYYYMMDD):				<input type="checkbox"/> RDT&E <input type="checkbox"/> PROCUREMENT <input type="checkbox"/> O&M		<input type="checkbox"/> INITIAL <input type="checkbox"/> INTERIM <input type="checkbox"/> FINAL																													
17. NAME (Last, First, Middle Initial)				18. DEPARTMENT		19. TELEPHONE NUMBER (Include Area Code)		20. EMAIL ADDRESS		21. DATE PREPARED (YYYYMMDD)																									
<table border="1"> <thead> <tr> <th rowspan="2">WBS ELEMENT CODE A</th> <th rowspan="2">WBS REPORTING ELEMENTS B</th> <th rowspan="2">NUMBER OF UNITS TO DATE C</th> <th colspan="3">COSTS INCURRED TO DATE (thousands of U.S. Dollars)</th> <th rowspan="2">NUMBER OF UNITS AT COMPLETION G</th> <th colspan="3">COSTS INCURRED AT COMPLETION (thousands of U.S. Dollars)</th> </tr> <tr> <th>NONRECURRING D</th> <th>RECURRING E</th> <th>TOTAL F</th> <th>NONRECURRING H</th> <th>RECURRING I</th> <th>TOTAL J</th> </tr> </thead> <tbody> <tr> <td></td> <td><b>Element Codes and Reporting Elements</b></td> <td><b>To Date Units</b></td> <td colspan="3"><b>To Date Costs (Nonrecurring, Recurring, Total)</b></td> <td><b>At Completion Units</b></td> <td colspan="3"><b>At Completion Costs (Nonrecurring, Recurring, Total)</b></td> </tr> </tbody> </table>										WBS ELEMENT CODE A	WBS REPORTING ELEMENTS B	NUMBER OF UNITS TO DATE C	COSTS INCURRED TO DATE (thousands of U.S. Dollars)			NUMBER OF UNITS AT COMPLETION G	COSTS INCURRED AT COMPLETION (thousands of U.S. Dollars)			NONRECURRING D	RECURRING E	TOTAL F	NONRECURRING H	RECURRING I	TOTAL J		<b>Element Codes and Reporting Elements</b>	<b>To Date Units</b>	<b>To Date Costs (Nonrecurring, Recurring, Total)</b>			<b>At Completion Units</b>	<b>At Completion Costs (Nonrecurring, Recurring, Total)</b>		
WBS ELEMENT CODE A	WBS REPORTING ELEMENTS B	NUMBER OF UNITS TO DATE C	COSTS INCURRED TO DATE (thousands of U.S. Dollars)			NUMBER OF UNITS AT COMPLETION G	COSTS INCURRED AT COMPLETION (thousands of U.S. Dollars)																												
			NONRECURRING D	RECURRING E	TOTAL F		NONRECURRING H	RECURRING I	TOTAL J																										
	<b>Element Codes and Reporting Elements</b>	<b>To Date Units</b>	<b>To Date Costs (Nonrecurring, Recurring, Total)</b>			<b>At Completion Units</b>	<b>At Completion Costs (Nonrecurring, Recurring, Total)</b>																												
22. REMARKS																																			
Remarks																																			

# Functional Cost-Hour Report

## DD Form 1921-1

UNCLASSIFIED



OSD CAPE

DD 1921-1

Insight into individual WBS elements

Recurring & Nonrecurring costs

Actual costs to date, estimates at completion

Detailed breakout of all resource data

Reporting by functional categories

SECURITY CLASSIFICATION Unclassified

### FUNCTIONAL COST-HOUR REPORT

Form Approved OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 16 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

1. MAJOR PROGRAM NAME:		2. PRIME MISSION PRODUCT		3. REPORTING ORGANIZATION TYPE		4. NAME/ADDRESS (Include Zip Code)		5. APPROVED PLAN NUMBER	
a. PHASE/MILESTONE				a. PRIME / ASSOCIATE CONTRACTOR		b. DIVISION			
b. Pre-A		c. FRP		b. DIRECT-REPORTING SUBCONTRACTOR					
c. A		d. LRP							
6. CUSTOMER (Direct-Reporting Subcontractor Use Only)					7. TYPE ACTION				
					a. CONTRACT NO.:				
					b. LATEST MODIFICATION				
					c. SOLICITATION NO.:				
					d. NAME:				
					e. TASK ORDER/DELIVERY ORDER/LOT NO.:				
8. PERIOD OF PERFORMANCE					9. REPORT CYCLE				
a. START DATE (YYYYMMDD):					a. INITIAL				
b. END DATE (YYYYMMDD):					b. INTERM				
					c. FINAL				
10. NAME (Last, First, Middle Initial)					11. TELEPHONE NO. (Include Area Code)				
12. DEPARTMENT					13. EMAIL ADDRESS				
14. DATE PREPARED (YYYYMMDD)									
15. WBS ELEMENT CODE					16. WBS REPORTING ELEMENT				
17. NUMBER OF UNITS TO DATE					18. NUMBER OF UNITS AT COMPLETION				
19. COSTS AND HOURS INCURRED TO DATE (thousands of U.S. Dollars or thousands of hours)					20. COSTS AND HOURS INCURRED AT COMPLETION (thousands of U.S. Dollars or thousands of hours)				
A. NONRECURRING					B. RECURRING				
C. TOTAL					D. NONRECURRING				
E. RECURRING					F. TOTAL				
FUNCTIONAL DATA ELEMENTS									
ENGINEERING									
(1) DIRECT ENGINEERING LABOR HOURS									
(2) DIRECT ENGINEERING LABOR DOLLARS									
(3) ENGINEERING OVERHEAD DOLLARS									
(4) TOTAL ENGINEERING DOLLARS									
MANUFACTURING OPERATIONS									
(5) DIRECT TOOLING LABOR HOURS									
(6) DIRECT TOOLING LABOR DOLLARS									
(7) DIRECT TOOLING & EQUIPMENT DOLLARS									
(8) DIRECT QUALITY CONTROL LABOR HOURS									
(9) DIRECT QUALITY CONTROL LABOR DOLLARS									
(10) DIRECT MANUFACTURING LABOR HOURS									
(11) DIRECT MANUFACTURING LABOR DOLLARS									
(12) MANUFACTURING OPERATIONS OVERHEAD DOLLARS (Including Tooling and Quality Control)									
(13) TOTAL MANUFACTURING OPERATIONS DOLLARS (Sum of rows 6, 7, 9, 11, and 12)									
MATERIALS									
(14) RAW MATERIAL DOLLARS									
(15) PURCHASED PARTS DOLLARS									
(16) PURCHASED EQUIPMENT DOLLARS									
(17) MATERIAL HANDLING OVERHEAD DOLLARS									
(18) TOTAL DIRECT-REPORTING SUBCONTRACTOR DOLLARS									
(19) TOTAL MATERIAL DOLLARS									
OTHER COSTS									
(20) OTHER COSTS NOT SHOWN ELSEWHERE (Specify in Remarks)									
SUMMARY									
(21) TOTAL COST (Direct and Indirect)									
22. REMARKS									

DD FORM 1921-1, MAY 2011

SECURITY CLASSIFICATION Unclassified

Functional Categories

Metadata

WBS Element Code and Name

Number of Units to Date and at Completion

Costs and Hours Incurred to Date

Costs and Hours Incurred at Completion

Remarks

# Progress Curve Report

## DD Form 1921-2

UNCLASSIFIED



OSD CAPE

DD 1921-2

For specific hardware WBS elements

Unit or Lot reporting

Technical Characteristics

To Date, Direct Recurring costs & hours

Detailed breakout of resource data

Reporting by functional category

SECURITY CLASSIFICATION		Unclassified	
PROGRESS CURVE REPORT			
			Form Approved OMB No. 0704-0188
<p>The public reporting burden for this collection of information is estimated to average 16 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.</p>			
1. MAJOR PROGRAM		2. PRIME MISSION PRODUCT	
a. NAME:		b. NAME:	
3. PHASE/MILESTONE		4. NAME/ADDRESS (Include ZIP Code)	
a. Pre-A		a. PERFORMING ORGANIZATION b. DIVISION	
b. B			
c. C-LRP			
c. FRP			
d. S			
5. APPROVED PLAN NUMBER		6. CUSTOMER (Direct-Reporting Subcontractor Use Only)	
7. TYPE ACTION		8. REPORTING ORGANIZATION TYPE	
a. CONTRACT NO.		a. PRIME / ASSOCIATE	
b. LATEST MODIFICATION		b. DIRECT-REPORTING SUBCONTRACTOR	
c. SOLICITATION NO.		c. GOVERNMENT	
d. NAME:			
e. TASK ORDER/DELIVERY ORDER/LOT NO.:			
9. PERIOD OF PERFORMANCE		10. SUBMISSION NUMBER	
a. START DATE (YYYYMMDD):		11. RESUBMISSION NUMBER	
b. END DATE (YYYYMMDD):		12. REPORT AS OF (YYYYMMDD)	
3. NAME (Last, First, Middle Initial)		14. DEPARTMENT	
		15. TELEPHONE NO. (Include Area Code)	
		16. E-MAIL ADDRESS	
		17. DATE PREPARED (YYYYMMDD)	
8. WBS ELEMENT CODE		19. WBS REPORTING ELEMENT	
WBS Element Code and Name		20. UNITS/LOTS COMPLETED	
		a. UNIT TOTAL	
		b. LOT TOTAL	
		21. APPROPRIATION	
		a. RDT&E	
		b. PROCUREMENT	
		c. O&M	
DATA ELEMENTS		A. COMPLETED UNITS/LOTS (thousands of U.S. Dollars or thousands of hours)	
		A1 A2 A3 A4	
(1) MODEL AND SERIES			
(2) FIRST UNIT			
(3) LAST UNIT			
(4) CONCURRENT UNITS/LOTS			
CHARACTERISTICS			
(5a) Weight			
(5b) Speed			
(5c) Power			
ENGINEERING (RECURRING ONLY)			
(6) DIRECT ENGINEERING LABOR HOURS			
(7) DIRECT ENGINEERING LABOR DOLLARS			
MANUFACTURING OPERATIONS (RECURRING ONLY)			
(8) DIRECT TOOLING LABOR HOURS			
(9) DIRECT TOOLING LABOR DOLLARS			
(10) DIRECT TOOLING & EQUIPMENT DOLLARS			
(11) DIRECT QUALITY CONTROL LABOR HOURS			
(12) DIRECT QUALITY CONTROL LABOR DOLLARS			
(13) DIRECT MANUFACTURING LABOR HOURS			
(14) DIRECT MANUFACTURING LABOR DOLLARS			
(15) TOTAL DIRECT MANUFACTURING OPERATIONS DOLLARS (Sum of rows 9,10,12, a			
MATERIALS (RECURRING ONLY)			
(16) RAW MATERIALS DOLLARS			
(17) PURCHASED PARTS DOLLARS			
(18) PURCHASED EQUIPMENT DOLLARS			
(19) TOTAL DIRECT-REPORTING SUBCONTRACTOR DOLLARS			
(20) TOTAL DIRECT MATERIAL DOLLARS			
OTHER COSTS (RECURRING ONLY)			
(21) OTHER DIRECT COSTS NOT SHOWN ELSEWHERE (Specify in Remarks)			
SUMMARY (RECURRING ONLY)			
(22) TOTAL DIRECT COST			
22. REMARKS			
Remarks			

Functional Categories

Completed Units/Lots

Work in Process

Total Direct Costs and Hours Incurred to Date

Remarks

DD FORM 1921-2, 20110518

PREVIOUS EDITION IS OBSOLETE.

SECURITY CLASSIFICATION

Unclassified

# Contractor Business Data Report

## DD Form 1921-3

UNCLASSIFIED



OSD CAPE

DD 1921-3

Report per contractor site

Covers all DoD business

Direct Costs by Program

Indirect Cost Categories

Direct Labor Rates by Function

Organization & Accounting Changes

CONTRACTOR BUSINESS DATA REPORT														Form Approved OMB No. 0704-0188	
The public reporting burden for this collection of information is estimated to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate, Information Management Division, 1155 Defense Pentagon, Washington, DC 20301-1155 (0704-0188). Respondents should be aware that notwithstanding any provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.															
1. CONTRACTOR NAME/ADDRESS (Include Zip Code)				2. FPR UNIT		3. IMPLEMENTING CONTRACT NUM.				4. DATA PERIOD (X)		5. FISCAL YEAR (YY)		6. DATES IN FISCAL YEAR (YYYYMM)	
Metadata										Prior Year		Start Date:			
										Current Year		End Date:			
										Future Year					
7. PREPARER'S NAME (Last, First, Middle Initial)				8. DEPARTMENT		9. TELEPHONE NO. (Include Area Code)				10. EMAIL ADDRESS		11. DATE PREPARED (YYYYMMDD)			
Overhead Accumulation, Distribution, and Application															
DIRECT COST BY PROGRAM															
DIRECT: COST / HOURS / MANPOWER (Report dollars and hours in thousands)															
Program Name		A/F	Contract Number	Equivalent Units	Buyer	Engineering		Manufacturing Operations			Materials		Other		
a			b	c	d	Workers e	Dollars f	Hours g	Workers h	Dollars i	Hours j	Dollars k	Workers l	Dollars m	
1.															
2.															
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															
11. Other DoD Effort															
12. Other Government Effort															
13. Commercial Effort															
14. Total Direct Cost and Hours Base							\$0.0	0.0		\$0.0	0.0	\$0.0		\$0.0	
a. Total Direct Workers						0			0			0		0	
INDIRECT COST CATEGORY															
INDIRECT: COST / HOURS / MANPOWER (Report dollars and hours in thousands)															
						Engineering		Manufacturing Operations			Materials		G&A		
						Workers o	Dollars p	Hours q	Workers r	Dollars s	Hours t	Dollars u	Workers v	Dollars w	
15. Indirect Labor															
16. Employee Benefits															
17. Payroll Taxes															
18. Employment															
19. Communication/Travel															
20. Production Related															
21. Facilities-Building/Land															
22. Facilities-Furniture/Equipment															
23. Administration															
24. Future Business															
25. Other Miscellaneous															
26. Credits															
27. Total Indirect Cost and Hours															
28. Total G&A Cost and Hours															
29. Indirect/Direct Cost Rate															
30. G&A Rate/(Direct + Indirect)															
DD FORM 1921-3, MAY 2011															
CONTRACTOR BUSINESS DATA REPORT - PAGE 2															
PRODUCTION CAPACITY															
Current Year															
Method of Calculating "FPR unit % of Full Production Capacity"															
FPR Unit % of Full Production Capacity															
Number of Shifts															
Current Year (Report hours in thousands)															
				1st Quarter		2nd Quarter		3rd Quarter		4th Quarter		Prior Year		Year:	
				Workers a	Hours b	Basic Rate\$ c	Effective Rate\$ d	Workers a	Hours b	Basic Rate\$ c	Effective Rate\$ d	Workers a	Hours b	Basic Rate\$ c	Effective Rate\$ d
DIRECT LABOR RATES (FUNCTIONAL CATEGORIES)															
1. Engineering - Direct Labor															
2. Manufacturing Operations - Direct Labor															
a. Tooling - Direct Labor															
b. Quality Control - Direct Labor															
c. Manufacturing - Direct Labor															
Total FPR Unit Revenue (Sales) (thousands of dollars)				Prior Year		Current Year									
								Revenue							
Organizational Changes (For Each Year Reported)								Accounting Changes (For Each Year Reported)							
REMARKS															
Remarks															

# Contractor Sustainment Functional Cost-Hour Report

## DD Form 1921-5

UNCLASSIFIED



OSD CAPE

DD 1921-5

Insight into individual WBS elements

Recurring & Nonrecurring costs

Actual costs to date, estimates at completion

Detailed breakout of all resource data

Reporting by sustainment functional categories

Sustainment Functional Categories

CONTRACTOR SUSTAINMENT FUNCTIONAL COST-HOUR REPORT										Form Approved OMB No. 0704-0188	
<p>The public reporting burden for this collection of information is estimated to average 16 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.</p>											
1. MAJOR PROGRAM a. NAME:		2. PRIME MISSION PRODUCT		3. REPORTING ORGANIZATION TYPE		4. NAME/ADDRESS (Include Zip Code)		5. APPROVED PLAN NUMBER			
b. PHASE/MILESTONE						a. PERFORMING ORGANIZATION		b. DIVISION			
Pre-A		B		C-FRP							
A		C-LRP		O&S							
6. CUSTOMER (Direct-Reporting Subcontractor Use Only)						7. TYPE ACTION					
						a. CONTRACT NO.:		c. SOLICITATION NO.:		e. TASK ORDER/DELIVERY ORDER/LOT NO.:	
						b. LATEST MODIFICATION:		d. NAME:			
8. PERIOD OF PERFORMANCE						9. REPORT CYCLE		10. SUBMISSION NUMBER		11. RESUBMISSION NUMBER	
a. START DATE (YYYYMMDD):						INITIAL				12. REPORT AS OF (YYYYMMDD)	
b. END DATE (YYYYMMDD):						INTERM					
						FINAL					
13. NAME (Last, First, Middle Initial)			14. DEPARTMENT			15. TELEPHONE NO. (include Area Code)			16. EMAIL ADDRESS		17. DATE PREPARED (YYYYMMDD)
18. WBS ELEMENT CODE			19. WBS REPORTING ELEMENT			20. NUMBER OF UNITS			21. APPROPRIATION		
WBS Element Code and Name						a. TO DATE			ROT&E		
						at Completion			PROCUREMENT		
									O&M		
SUSTAINMENT FUNCTIONAL DATA ELEMENTS						COSTS AND HOURS INCURRED TO DATE (thousands of U.S. Dollars or thousands of hours)			COSTS AND HOURS INCURRED AT COMPLETION (thousands of U.S. Dollars or thousands of hours)		
						A. NONRECURRING			B. RECURRING		
						C. TOTAL			D. NONRECURRING		
									E. RECURRING		
									F. TOTAL		
ENGINEERING											
(1) DIRECT ENGINEERING LABOR HOURS											
(2) DIRECT ENGINEERING LABOR DOLLARS											
(3) ENGINEERING OVERHEAD DOLLARS											
(4) TOTAL ENGINEERING DOLLARS											
PROGRAM MANAGEMENT											
(5) DIRECT PROGRAM MANAGEMENT LABOR HOURS											
(6) DIRECT PROGRAM MANAGEMENT LABOR DOLLARS											
(7) PROGRAM MANAGEMENT OVERHEAD DOLLARS											
(8) TOTAL PROGRAM MANAGEMENT DOLLARS											
MAINTENANCE OPERATIONS											
(9) TOUCH MAINTENANCE LABOR HOURS											
(10) TOUCH MAINTENANCE LABOR DOLLARS											
(11) TOUCH MAINTENANCE OVERHEAD DOLLARS											
(12) SUPPORT MAINTENANCE LABOR HOURS											
(13) SUPPORT MAINTENANCE LABOR DOLLARS											
(14) SUPPORT MAINTENANCE OVERHEAD DOLLARS											
(15) TOTAL MAINTENANCE OPERATIONS DOLLARS											
MATERIALS											
(16) RAW MATERIAL DOLLARS											
(17) PURCHASED PARTS DOLLARS											
(18) PURCHASED EQUIPMENT DOLLARS											
(19) MATERIAL HANDLING/OVERHEAD DOLLARS											
(20) TOTAL DIRECT-REPORTING SUBCONTRACTOR DOLLARS											
(21) TOTAL MATERIAL DOLLARS											
OTHER COSTS											
(22) OTHER COSTS NOT SHOWN ELSEWHERE (Specify in Remarks)											
SUMMARY											
(23) TOTAL COST (Direct and Overhead)											
22. REMARKS											
Remarks											

# Initial and Final Software Resource Data Reports (SRDRs)



OSD CAPE

## SRDR

Software size, effort, and schedule

Data further explained in data dictionary

Initial Developer Report-  
Due at beginning of  
project increment  
(estimates)

Final Developer Report-  
Due at completion of  
project increment  
(actuals)

Section 3.3 ACTUAL PRODUCT SIZE REPORTING						
NUMBER OF SOFTWARE REQUIREMENTS	TOTAL	NUMBER OF EXTERNAL INTERFACE REQUIREMENTS	TOTAL	REQUIREMENTS VOLATILITY		
	NEW		NEW			
Section 3.3.4 FINAL TOTAL DELIVERED CODE		COUNTING CONVENTION		PRIME CONTRACTOR ONLY	ALL OTHER SUBCONTRACTORS	
Section 3.3.4.1 AMOUNT OF DELIVERED CODE DEVELOPED NEW			HUMAN GENERATED	<b>Software Size</b>		
			AUTO GENERATED			
Section 3.3.4.1 AMOUNT OF DELIVERED CODE REUSED FROM EXTERNAL SOURCE (i.e., NOT INHERITED FROM PREVIOUS INCREMENT/BUILD OR PREDECESSOR)			WITH MODIFICATIONS			
			WITHOUT MODIFICATIONS			
Section 3.3.4.1 AMOUNT OF DELIVERED CODE REUSED FROM EXTERNAL SOURCE (i.e., NOT INHERITED FROM PREVIOUS INCREMENT/BUILD OR PREDECESSOR)			WITH MODIFICATIONS			
Section 3.4 ACTUAL RESOURCE AND SCHEDULE REPORTING						
SOFTWARE ACTIVITY NAME		MAPS TO CSDR WBS NUMBER(S)	START MONTH	END MONTH	TOTAL HOURS PRIME CONTRACTOR ONLY	TOTAL HOURS ALL OTHER SUBCONTRACTORS
(Example: SOFTWARE REQUIREMENTS ANALYSIS)						
(Example: SOFTWARE ARCHITECTURE AND DETAILED DESIGN)						
(Example: SOFTWARE CODING AND UNIT TESTING)						
(Example: SOFTWARE INTEGRATION)						
(Example: SOFTWARE QUALIFICATION TESTING)						
(Example: SYSTEM/SOFTWARE INTEGRATION)						
(Example: SYSTEM/SOFTWARE QUALIFICATION TESTING)						
(Example: SOFTWARE QUALITY ASSURANCE)						
(Example: SOFTWARE CONFIGURATION MANAGEMENT)						
(Example: SOFTWARE PROGRAM MANAGEMENT)						
ALL OTHER DIRECT SOFTWARE ENGINEERING DEVELOPMENT EFFORT (Example: DATA, PROCESS IMPROVEMENT, INDEPENDENT VERIFICATION & VALIDATION, PROBLEM RESOLUTION)						
TOTAL SOFTWARE DEVELOPMENT EFFORT						
COMMENTS						
<b>Comments</b>						

**Effort and schedule**

**Comments**



# CSDR Planning



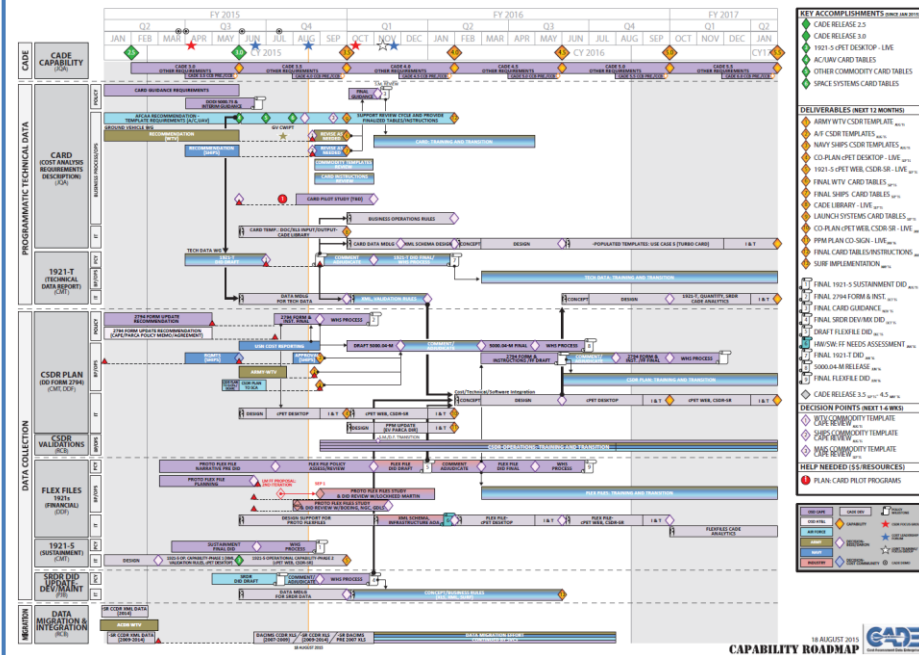
# New CSDR Planning Initiative Transition to Services:

OSD CAPE

## COST COMMUNITY ASSISTANCE:

### TRANSITION TEAM INVOLVEMENT:

- Put together a CSDR plan transition team for each of the services. This team will be responsible for:
  - Identifying all RFPs that meet CSDR reporting thresholds
  - Drafting all initial CSDR plans
  - Coordinating with the CWIPT to ensure all cost community needs are identified in the plan
  - Resolution of all cost data compliance issues
- Designate one senior service team member to coordinate and manage transition efforts
  - This POC will have initial approval from the services perspective of all CSDR plans before they are forwarded to CAPE for DDCA signature
  - Assist with cost community tasks such as CSDR plans development, Plans validation, data migration and other cost collecting initiatives



### OSD POCs:

PM CADE: Bess Dopkeen

DPM: Daron Fullwood [Daron.D.Fullwood.civ@mail.mil](mailto:Daron.D.Fullwood.civ@mail.mil)

Contractor Suppt: James Parnham

[james.m.parnham.ctr@mail.mil](mailto:james.m.parnham.ctr@mail.mil)



# Transition to the Services

OSD CAPE

## Headquarters:

- Step in when needed to ensure programs are CSDR compliant
- Brief senior leadership on any CSDR issues
- Coordinate:
  - Service Component
  - Program Office
  - DCARC
- ASA(ALT) Army
- ASN(RDA) Navy
- SAF-AQ Air Force

## Service Component:

- Assist in identifying all RFP's
- Initiate CSDR process at Program Office
- Help develop all initial plans
- Provide all CSDR plan documentation
- CSDR Compliance
- Coordinate:
  - Service Cost Center
  - CAPE
  - Contractors

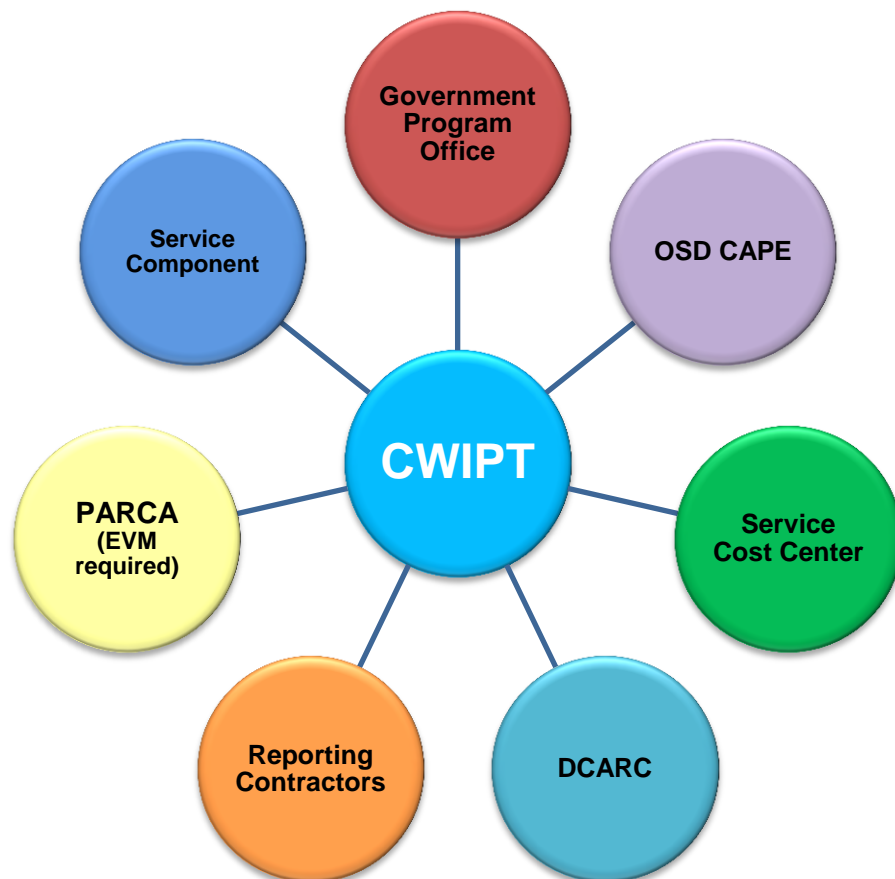
## Service Cost Center:

- Assist in identifying all RFP's
- Help develop & obtain approval of all initial CSDR plans
- Ensure cost estimating needs are being met
- CSDR Compliance
- Coordinate:
  - Service Component
  - DCARC
  - CAPE

# Cost Working Integrated Product Team (CWIPT)

OSD CAPE

Participants	Role in PPM	Role
Service Component POC	Program Collaborator	Initiate CSDR process at Program Office; identify all RFP's going out
Program Office	Program Collaborator	Help develop initial plans; make DCARC/Service Component aware of all upcoming efforts
OSD CAPE	Program Collaborator	Provide input to plan to ensure cost needs are being met; provide final approval of plans
Service Cost Center POC	Program Collaborator	Help develop initial plan; provide input to plan to ensure cost needs are being met; provide initial approval
DCARC	DCARC Reviewer	Manage the entire CSDR planning process; ensure all rules and regulations are being followed
Reporting Contractors	N/A	If sole source, provide input and help government understand processes and procedures
PARCA	Program Collaborator	Provide input to ensure cost reporting structure and WBS are consistent where needed

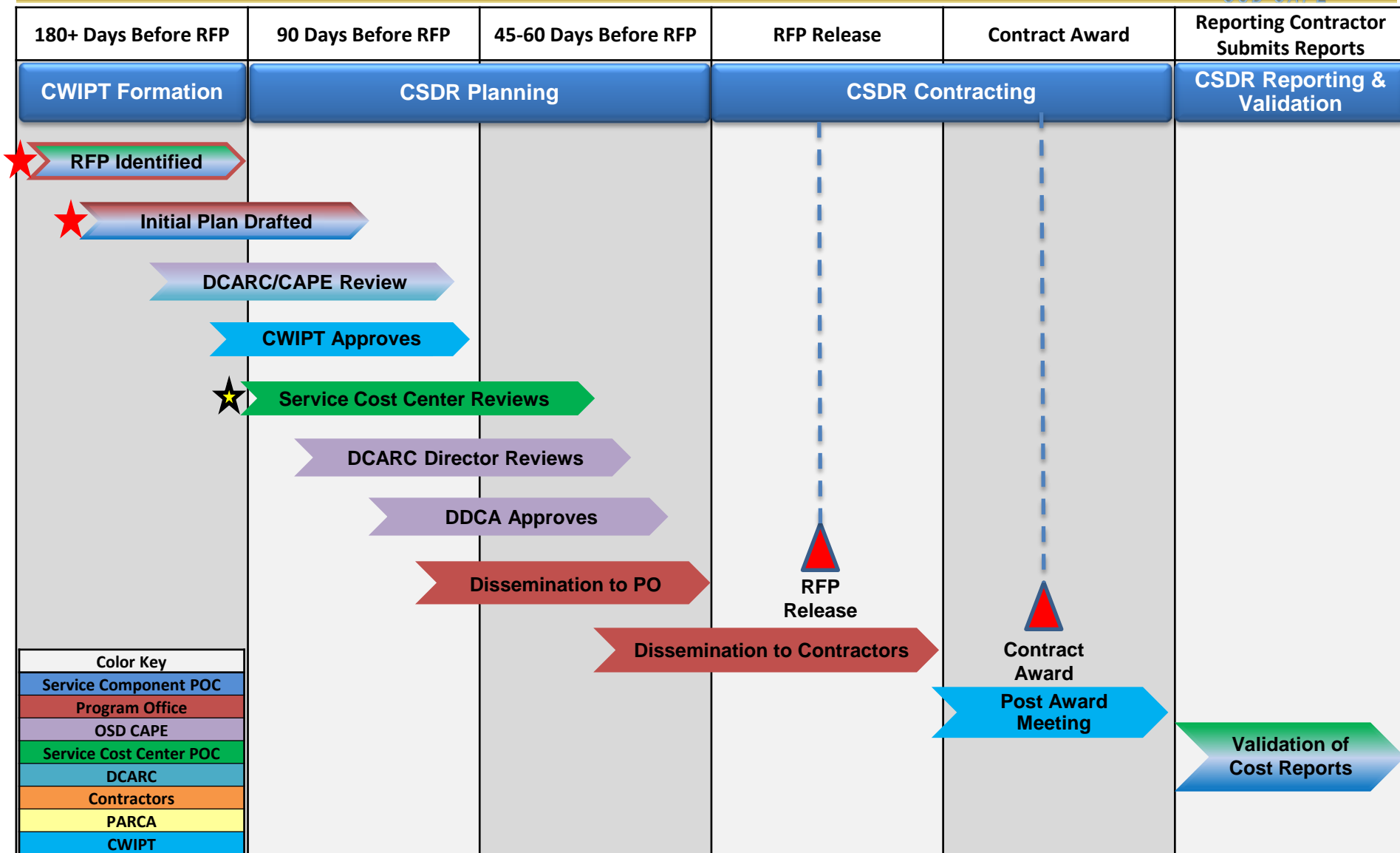


**CWIPT is responsible to the Program Manager for ensuring CSDR plans provide accurate, timely data in order to support cost estimating needs. The Program Manager is ultimately responsible for the formation of the CWIPT.**



# Top Level CSDR Process

OSD CAPE





# RFP Identified

OSD CAPE

180 Days Before RFP

90 Days Before RFP

30 Days Before RFP

RFP Release

Contract Award

Reporting Contractor  
Submits Reports

RFP Identified

## CRITICAL to the SUCCESS OF CSDRs

- **All Stakeholders should assist in identifying:**  
Contracts > \$50M
  - Competitive Bid? Sole source?
  - When will the contract be awarded?
- **Review all sources of contract information**
- **Confirm Release date and contract award date**
- **After RFP identified:**
  - Set up initial CSDR planning meeting with key customers (NCCA, PMO, CAPE Analyst, EV Service Center, Syscom & DCARC)
  - **Ensure CSDR language and plan are included in the RFP**

RFP and/or Contract Award information should always be relayed to DCARC office. The Service Component POC and the PMO/SPO would be responsible relaying this information.

Post Award Meeting

Validation of  
Cost Reports

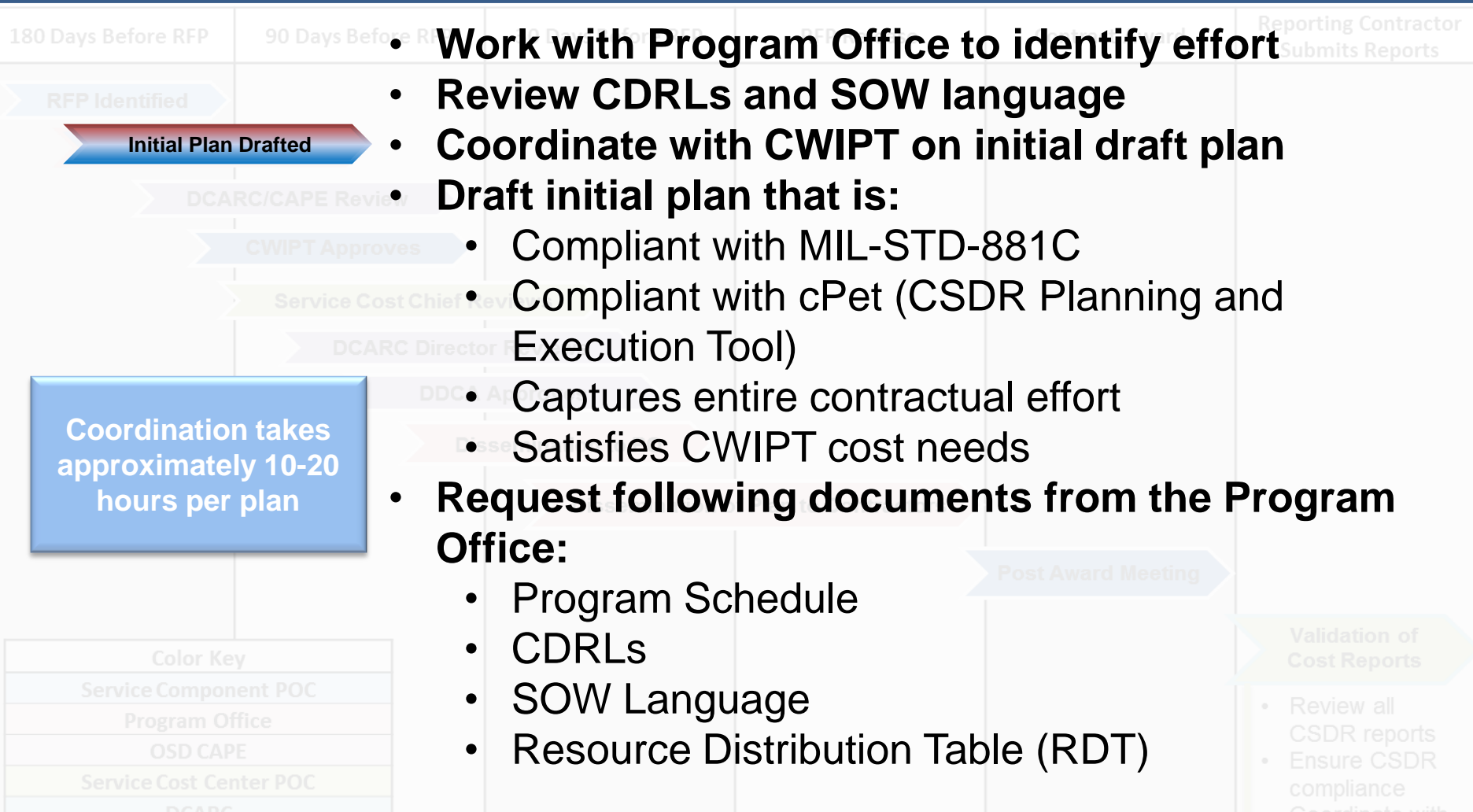
- Review all CSDR reports
- Ensure CSDR compliance
- Coordinate with contractors

**Result: Service Component POC and PMO/SPO should always give DCARC heads up in advance**



# Initial Plan Drafted

OSD CAPE

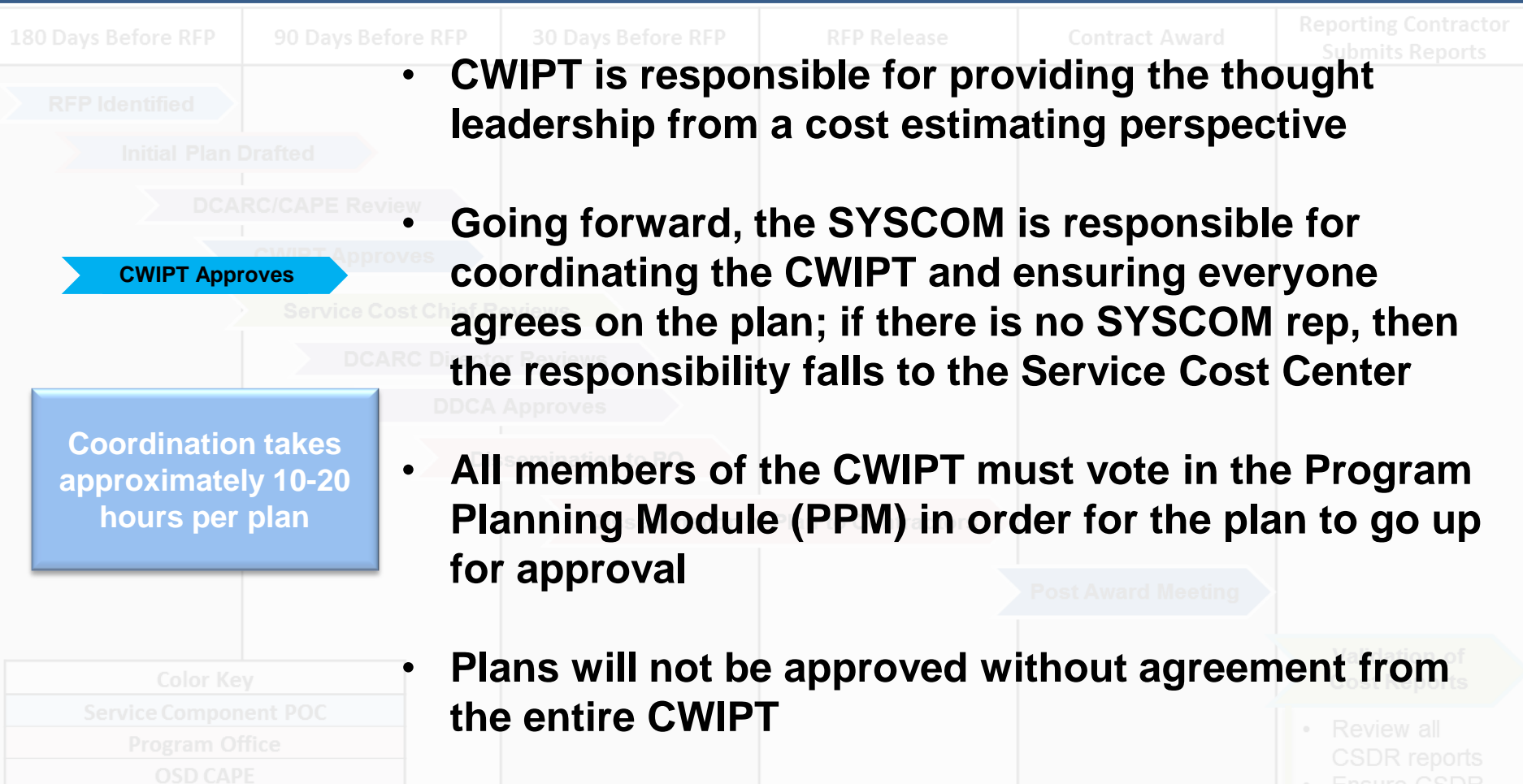


**Result: Service Component POC and PMO/SPO are responsible to work with DCARC and the Service Cost Center on the initial plan**



# CWIPT Approves Plan

OSD CAPE



**CWIPT is responsible to the Program Manager for ensuring CSDR plans provide accurate, timely data in order to support cost estimating needs. The Program Manager is ultimately responsible for the formation of the CWIPT.**



# Service Cost Center CSDR Plan Review

OSD CAPE

Service Cost Center will hold a meeting to ensure the CSDR plan meets cost community needs. The POC will provide initial approval of the CSDR plan before forwarding it to CAPE for final approval.

## Service Cost Center Reviews

### LESSONS LEARNED:

Review plan & understand plan package prior to meeting

Plan accordingly for the data you need ahead of time

Gain CWIPT agreement prior to meeting

Include PMO in invite

Include CAPE analyst

### The following questions must be considered at this meeting:

- How are you going to use this data?
- Does this plan get you the data that you need?
- Does this plan get you the data when you need it?
- How many data points will you have for the next Milestone decision?
- Does this plan capture the entire contractual effort?
- Are all of the efforts on the contract (i.e. new build vs. buying kits vs. upgrades) discretely broken out in either the WBS or the reporting events?
- Will there be any learning on any aspects of the contract? Are 1921-2's applicable?
- Is there any software development effort? Are the SRDRs broken out by CSCI?
- How is the rate tooling broken out? Is it worthwhile getting?
- Are the modification/Installation/Integration costs segregated?
- Are there any anti-tamper or cyber security costs for this program?

**Result: Entire CWIPT team should attend meeting and be prepared to answer all questions**



# Prepare for CAPE CSDR Review Meeting

OSD CAPE

DCARC Director Reviews

DDCA Approves

## Plan Package Presentation:

- Provide context
- Quality must be precise
- Solid story line
- CAPE Test



How am I going to use this data?  
How does this help me with my estimate?

When do I need the data and do the reporting events on the plan match my need?

Is there any software development effort? If so, how much? Do I need SRDRs?

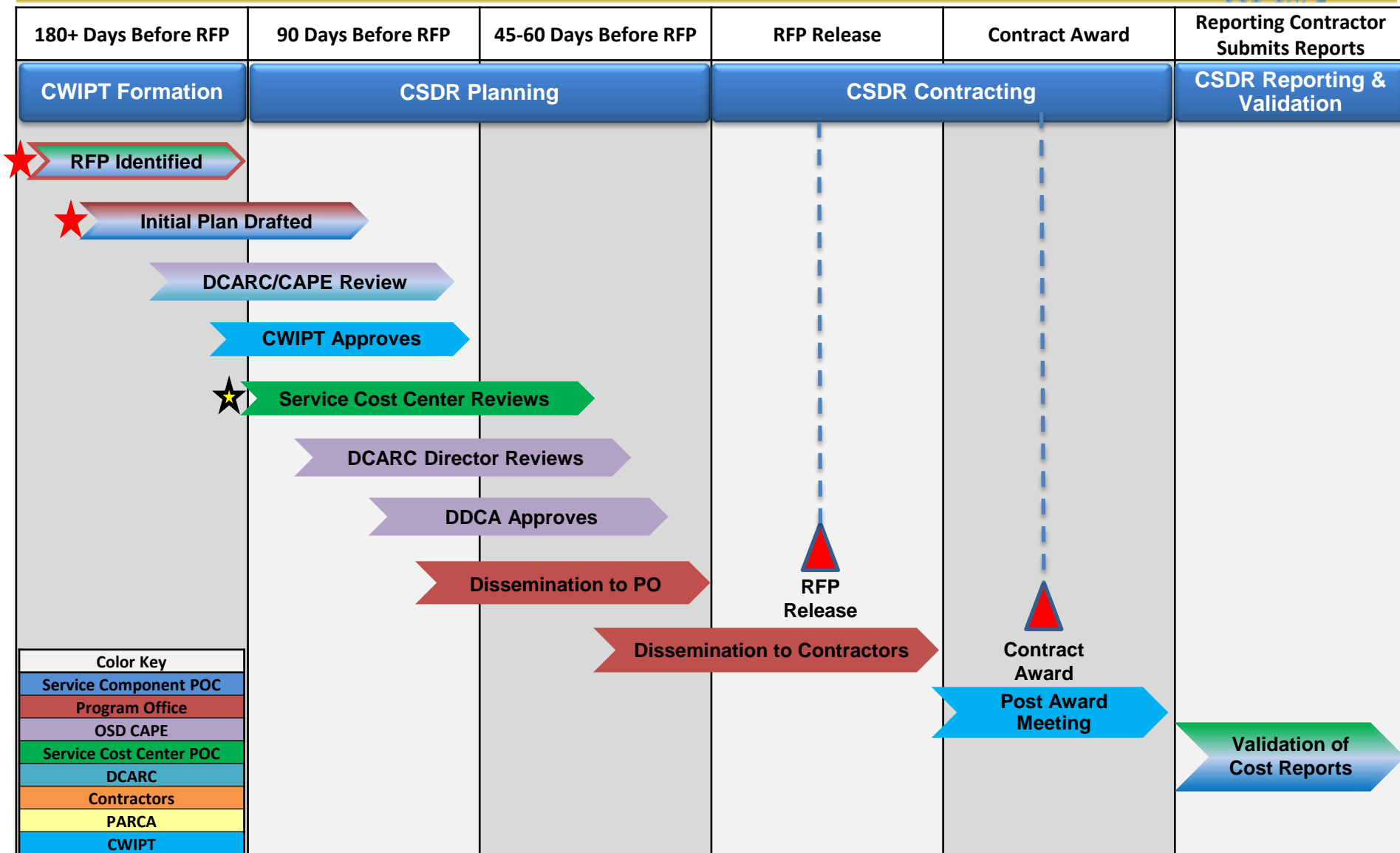
Will there be any learning on this contract?

**Result: Entire CWIPT team should attend meeting and be prepared to answer all questions**



# Top Level CSDR Process

OSD CAPE





# CSDR Plan Read Ahead

## Plan Package Information

**Plan Package Name:** NAME

**Plan Package contents:**

- X (NEW/REVISED) Program Plan(s)
- X (NEW/REVISED) Contract Plan(s)
- X (NEW/REVISED) Subcontract Plan(s)

**RFP Date:** DATE

**Contract Award Date:** DATE

**Plan Version Type:** NEW/REVISED/CANCELLED

### Plan Package Synopsis:

Give a brief synopsis of the CSDR plan effort, similar to the Dr. Burke transmittal memo. Please include the following information: are these new plans or revised plans? What is this effort for? Where is the program in its lifecycle?

PLEASE BE BRIEF.

### Contract Description:

PLEASE BE BRIEF. Summarize the objective in the Statement of Work.

## CWIPT Review

DCARC	CAPE	PMO	NCCA	NCCA Dir.
NAME	NAME	NAME	NAME	D. Thomas
YES NO	YES NO	YES NO	YES NO	YES NO

## Reporting Frequency

Plan Number	Contract Value	CSDR Reports	Frequency	Comments
N-XX-XX-XX Company Name		1921, -1, -2, -3, -5	Annually	1 Report per DO
		SRDR	Annually	For every release
N-XX-XX-XX Company Name		1921, -1, -2, -3, -5	Quarterly	For each completed lot
		SRDR	Annually	For every release
N-XX-XX-XX Company Name		1921, -1, -2, -3, -5	Quarterly	For each completed lot
		SRDR	Annually	For every release

## Other Pertinent Program Information

- 1) **Plans Previously Reviewed with ASCADD?**  
If YES, provide the action items that came out of that meeting and how they were addressed. BE BRIEF.
- 2) **Are there any special circumstances that need to be addressed with this plan package?** ANSWER. BE BRIEF.
- 3) **How are you going to use this data? How will this data help your estimate?** ANSWER. BE BRIEF.
- 2) **Where is the Program in its life cycle and where does this effort fit?** ANSWER. BE BRIEF.
- 5) **When is the next decision point for this program?** ANSWER. BE BRIEF.
- 6) **How many CSDR reports/data points are available for the decision review?** ANSWER. BE BRIEF.
- 7) **Please List all known contracting efforts >\$50M on the horizon. Anticipated RFP dates and Award dates.** ANSWER. BE BRIEF.
- 8) **What is the Program's DAES Rating? If there any major issues with the programs compliance, please discuss here.** ANSWER. BE BRIEF.



# FAR Part 12

OSD CAPE

- FAR Part 12 states that Contracting Officer shall not require certified cost and pricing data to establish price reasonableness for a commercial item during negotiations, as long as two or more vendors are bidding
- Programs try to use FAR Part 12 as rationale for not requiring CSDR cost reporting
- Commercial, Firm Fixed Price Contracts do not automatically meet requirements for CSDR waiver
  - Although FAR Part 12 precludes certified cost and pricing data in specific instances during prime, subcontract or contract modification *proposal*, it says nothing about excusing reporting for the life of the program.

**Bottom Line: FAR Part 12 Does Not Excuse CSDR Reporting! A Waiver is Still Required.**



# CSDR Compliance Rating Criteria

OSD CAPE

Rating criteria emphasizes on time data submission

RATING	CRITERIA
<b>Green</b>	No open CSDR compliance issues.
<b>Green Advisory</b>	All outstanding CSDR deliverables* are less than or equal to three months overdue.
<b>Yellow</b>	Any outstanding CSDR deliverable greater than three months, but less than or equal to six months overdue.
<b>Red</b>	Any outstanding CSDR deliverable greater than six months overdue.
<b>Red- Critical</b>	<ol style="list-style-type: none"> <li>1. Program Office released RFP without approved CSDR plan.</li> <li>2. Program Office awarded prime contract without approved CSDR plan or failed to mod contract to place an approved CSDR plan on contract.</li> <li>3. Program Office or Prime contractor failed to enforce flow down of CSDR requirements to direct reporting subcontractor or the prime contractor failed to mod subcontract to place an approved CSDR plan on contract.</li> </ol>
<b>Not Rated</b>	The program has no CSDR activity (e.g., approved waiver, Pre-MDAP, cancelled, has no CSDR activity, or not currently tracked)

## OF NOTE:

- CSDRs Assessed Qtrly w/DAES
- Reviewed as a part of DABs
- No ICE issued w/o approved CSDR plan on contract

\*CSDR deliverables include Contract Data Reporting Structure Dictionaries, CCDRs, SRDRs, and CDRLs

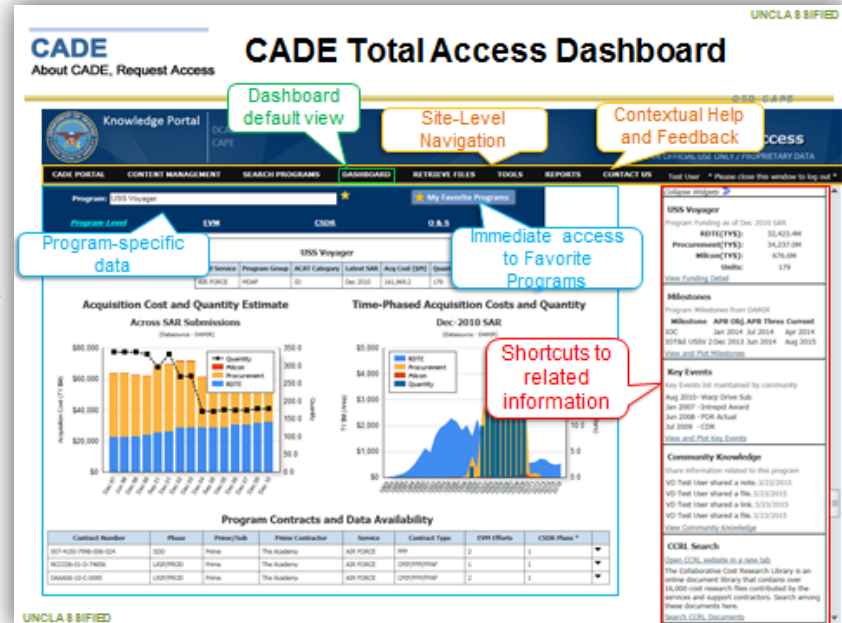


# “CADEPardy”



# CSDR Validation

## OSD CAPE

[illegible]

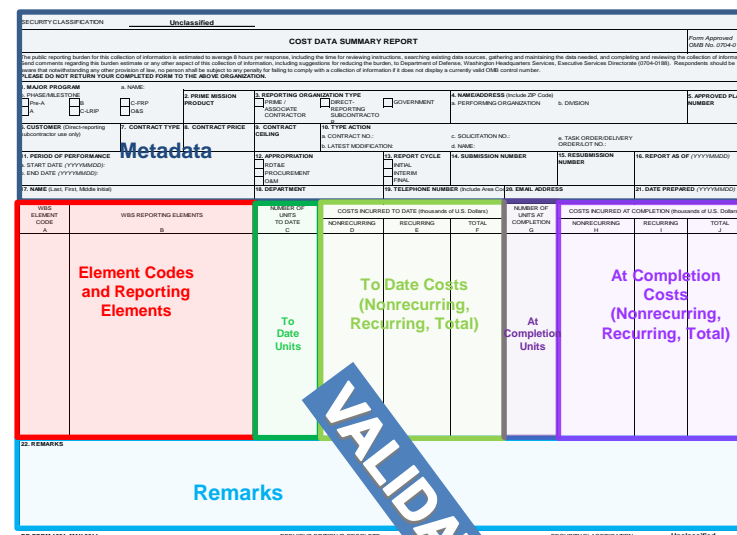
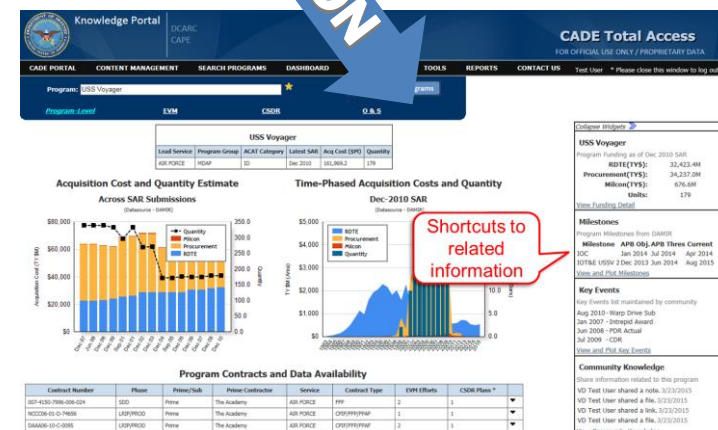
One of the most dangerous forms of human error  
is forgetting what one is trying to achieve.

# Importance of Validations

OSD CAPE

## Ensures:

- ✓ Data completeness and accuracy
- ✓ Comprehensive explanations of anomalies prior to acceptance
- ✓ Collective review by the cost community
- ✓ Ability to create a consistent and robust dataset



# Top Level CSDR Validation

OSD CAPE

## Pre-Validation

Contractor Uses cPet

Contractor Submits  
XML to CSDR S-R

## CSDR Validation

DCARC Initiates  
Validation

PO/CAPE/SCC  
Validate Submission

DCARC Emails  
Validation Report

Contractor  
Corrects Report

DCARC Re-Validates  
Submission

DCARC Accepts or  
Rejects Report

## CSDR Report Finalization

**FYSA:**  
THE CSDR S-R IS BEING  
UPDATED TO BLOCK  
SUBMISSIONS WITH MAJOR  
ERRORS. USE CPET!!

DCARC Publishes  
to CADE

OR

DCARC Rejects Report  
and Process Starts Over



### Color Key

Program Office

OSD CAPE

Service Cost Center POC

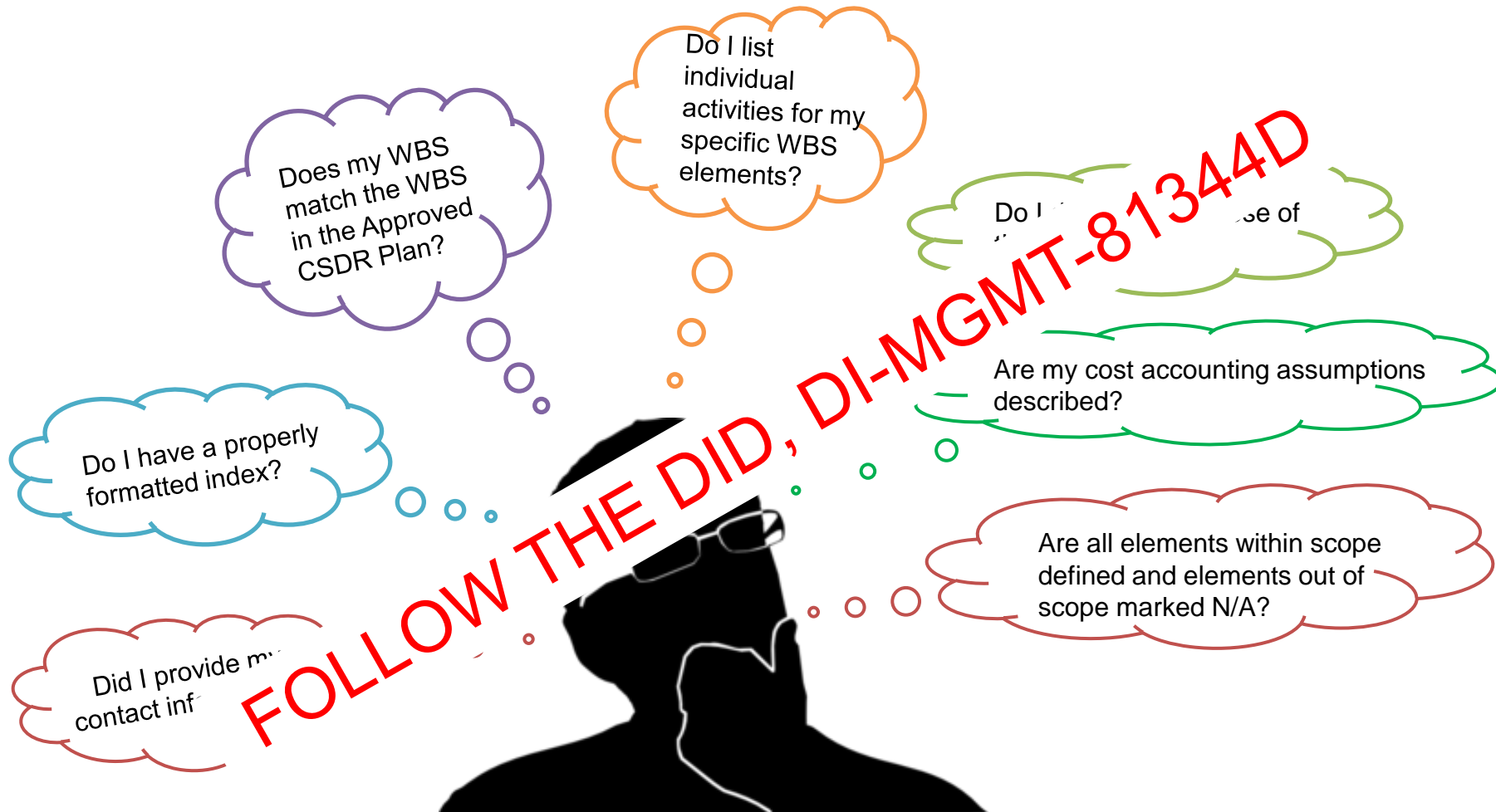
DCARC

Contractors



# When Creating a CWBS Dictionary:

OSD CAPE



**Save Some Time! Use cPet to Build Your Index and Dictionary Template!**

# CCDR Validation Process: cPet

## Automated Checks

UNCLASSIFIED

OSD CAPE

### cPet Checks:

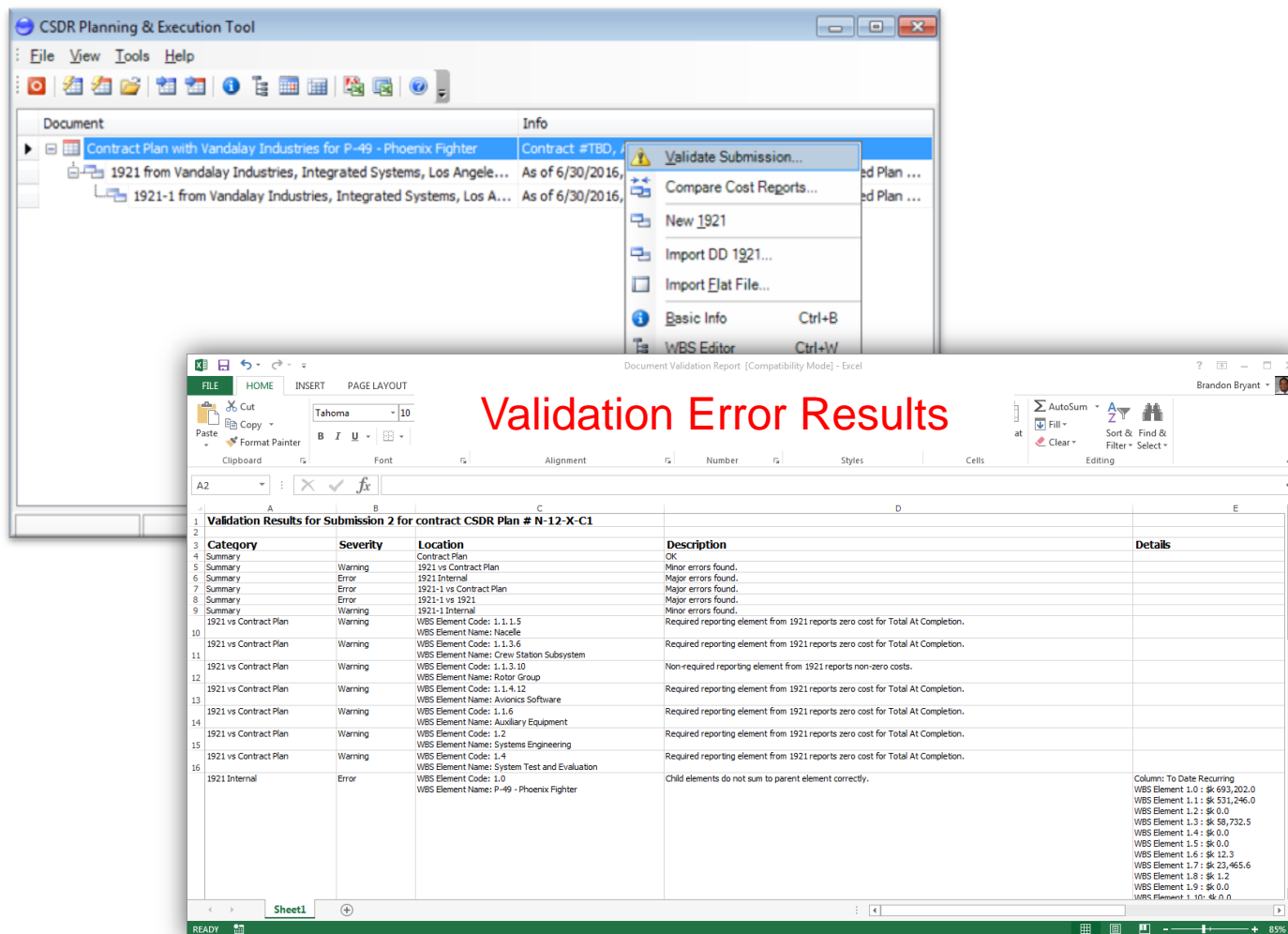
CCDRs are XML Compatible

CCDRs are consistent with the CSDR Contract Plan

Numbers sum correctly

Checks for numerical anomalies

1921, 1921-1, and 1921-2 reports are consistent



The image shows two overlapping windows. The top window is the 'CSDR Planning & Execution Tool' with a menu open showing options like 'Validate Submission...', 'Compare Cost Reports...', 'New 1921', 'Import DD 1921...', 'Import ELat File...', 'Basic Info', and 'WBS Editor'. The bottom window is an Excel spreadsheet titled 'Validation Error Results' showing a table of errors.

Category	Severity	Location	Description	Details
Summary	Warning	Contract Plan	OK	
Summary	Warning	1921 vs Contract Plan	Minor errors found.	
Summary	Error	1921 Internal	Major errors found.	
Summary	Error	1921-1 vs Contract Plan	Major errors found.	
Summary	Error	1921-1 vs 1921	Major errors found.	
Summary	Warning	1921-1 Internal	Minor errors found.	
1921 vs Contract Plan	Warning	WBS Element Code: 1.1.1.5	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 vs Contract Plan	Warning	WBS Element Code: 1.1.3.6	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 vs Contract Plan	Warning	WBS Element Name: Crew Station Subsystem	Non-required reporting element from 1921 reports non-zero costs.	
1921 vs Contract Plan	Warning	WBS Element Code: 1.1.3.10	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 vs Contract Plan	Warning	WBS Element Name: Rotor Group	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 vs Contract Plan	Warning	WBS Element Code: 1.1.4.12	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 vs Contract Plan	Warning	WBS Element Name: Avionics Software	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 vs Contract Plan	Warning	WBS Element Code: 1.1.6	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 vs Contract Plan	Warning	WBS Element Name: Auxiliary Equipment	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 vs Contract Plan	Warning	WBS Element Code: 1.2	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 vs Contract Plan	Warning	WBS Element Name: Systems Engineering	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 vs Contract Plan	Warning	WBS Element Code: 1.4	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 vs Contract Plan	Warning	WBS Element Name: System Test and Evaluation	Required reporting element from 1921 reports zero cost for Total At Completion.	
1921 Internal	Error	WBS Element Code: 1.0	Child elements do not sum to parent element correctly.	Column: To Date Recurring WBS Element 1.0: \$k 693,202.0 WBS Element 1.1: \$k 531,246.0 WBS Element 1.2: \$k 0.0 WBS Element 1.3: \$k 58,732.5 WBS Element 1.4: \$k 0.0 WBS Element 1.5: \$k 0.0 WBS Element 1.6: \$k 12.3 WBS Element 1.7: \$k 23,465.6 WBS Element 1.8: \$k 1.2 WBS Element 1.9: \$k 0.0 WBS Element 1.10: \$k 0.0

**\*\*All major errors must be corrected prior to submittal, cPet will identify those errors for you!!!!**

# CCDR Validation Process

## Manual Checks

UNCLASSIFIED

OSD CAPE

### Manual Checks:

All metadata is reported accurately

Units are reported accurately

Costs are categorized correctly

Costs increase from previous report

Appropriate and accurate explanations

COST DATA SUMMARY REPORT										
<p>The public reporting burden for this collection of information is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p> <p><b>PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.</b></p>										
<p><b>1. MAJOR PROGRAM</b> a. NAME: P-43 - Phoenix Fighter</p> <p><b>2. PRIME MISSION PRODUCT</b> P-43 - Phoenix Fighter</p> <p><b>3. REPORTING ORGANIZATION TYPE</b> <input checked="" type="checkbox"/> PRIME / ASSOCIATE CONTRACTOR <input type="checkbox"/> DIRECT-REPORTING SUBCONTRACTOR <input type="checkbox"/> GOVERNMENT</p> <p><b>4. NAME/ADDRESS (Include ZIP Code)</b> a. PERFORMING ORGANIZATION: Vandelay Industries, 352 Stark Rd., Los Angeles, CA 90048 b. DIVISION: Integrated Systems, 325 Stark Rd., Los Angeles, CA 90048</p> <p><b>5. APPROVED PLAN NUMBER</b> N-12-X-C1</p>										
<p><b>6. CUSTOMER (Direct-reporting subcontractor use only)</b> <b>7. CONTRACT TYPE</b> FFP <b>8. CONTRACT PRICE</b> \$867,392.5</p> <p><b>9. CONTRACT CEILING</b> <b>10. TYPE ACTION</b> a. CONTRACT NO.: XXXXXX-13-C-0019 b. LATEST MODIFICATION: P00421 c. SOLICITATION NO.: N/A d. NAME: Phoenix Fighter e. TASK ORDER/DELIVERY ORDER/LOT NO.: Lot 9</p>										
<p><b>11. PERIOD OF PERFORMANCE</b> a. START DATE (YYYYMMDD): 20150601 b. END DATE (YYYYMMDD): 20181230</p> <p><b>12. APPROPRIATION</b> <input type="checkbox"/> RDT&amp;E <input checked="" type="checkbox"/> PROCUREMENT <input type="checkbox"/> O&amp;M <b>13. REPORT CYCLE</b> <input type="checkbox"/> INITIAL <input type="checkbox"/> INTERIM <input checked="" type="checkbox"/> FINAL</p> <p><b>14. SUBMISSION NUMBER</b> 2 <b>15. RESUBMISSION NUMBER</b> 0 <b>16. REPORT AS OF (YYYYMMDD)</b> 20180630</p>										
<p><b>17. NAME (Last, First, Middle Initial)</b> Bellows, Drew R <b>18. DEPARTMENT</b> Finance <b>19. TELEPHONE NUMBER (Include Area Code)</b> (310) 555-0553 <b>20. EMAIL ADDRESS</b> drew.bellows@vandelayindustries.com <b>21. DATE PREPARED (YYYYMMDD)</b> 20180814</p>										
WBS ELEMENT CODE A	WBS REPORTING ELEMENTS B	NUMBER OF UNITS TO DATE C	COSTS INCURRED TO DATE (thousands of U.S. Dollars)			NUMBER OF UNITS AT COMPLETION G	COSTS INCURRED AT COMPLETION (thousands of U.S. Dollars)			
			NONRECURRING D	RECURRING E	TOTAL F		NONRECURRING H	RECURRING I	TOTAL J	
10	P-43 - Phoenix Fighter	10.0	\$4,353.9	\$693,202.0	\$698,161.9	10.0	\$5,106.7	\$702,468.1	\$707,574.8	
11	Air Vehicle	10.0	\$4,350.6	\$531,246.0	\$536,196.6	10.0	\$5,026.2	\$535,245.8	\$540,272.0	
111	Airframe	10.0	\$4,072.6	\$154,155.7	\$158,228.3	10.0	\$4,074.8	\$155,555.8	\$159,630.6	
1111	Airframe Integration, Assembly, Test and Checkout	10.0	\$40.7	\$5,051.4	\$5,092.1	10.0	\$42.9	\$6,451.5	\$6,494.4	
1112	Fuselage	10.0	\$4,025.5	\$99,587.2	\$103,612.7	10.0	\$4,025.5	\$99,587.2	\$103,612.7	
1112.1	Forward Fuselage	10.0	\$1,355.1	\$44,255.2	\$45,610.3	10.0	\$1,355.1	\$44,255.2	\$45,610.3	
1112.2	Center Fuselage	10.0	\$1,677.3	\$35,124.2	\$36,801.5	10.0	\$1,677.3	\$35,124.2	\$36,801.5	
1112.3	Aft Fuselage	10.0	\$993.1	\$20,207.8	\$21,201.0	10.0	\$993.1	\$20,207.8	\$21,201.0	
1113	Wing	10.0	\$0.0	\$35,021.5	\$35,021.5	10.0	\$0.0	\$35,021.5	\$35,021.5	
1114	Empennage	10.0	\$6.4	\$14,495.6	\$14,502.0	10.0	\$6.4	\$14,495.6	\$14,502.0	
1115	Nacelle	0.0	\$0.0	\$0.0	\$0.0	0.0	\$0.0	\$0.0	\$0.0	
112	Propulsion (P-429 Engine)	10.0	\$0.0	\$22,587.0	\$22,587.0	10.0	\$0.0	\$22,587.0	\$22,587.0	
113	Vehicle Subsystems	10.0	\$5.2	\$72,108.0	\$72,113.2	10.0	\$5.2	\$72,108.0	\$72,113.2	
113.1	Vehicle Subsystem Integration, Assembly, Test, and Checkout	10.0	\$5.2	\$2,105.0	\$2,110.2	10.0	\$5.2	\$2,105.0	\$2,110.2	
113.2	Flight Control Subsystem	10.0	\$0.0	\$4,025.1	\$4,025.1	10.0	\$0.0	\$4,025.1	\$4,025.1	
113.3	Auxiliary Power Subsystem	10.0	\$0.0	\$5,048.6	\$5,048.6	10.0	\$0.0	\$5,048.6	\$5,048.6	
113.4	Hydraulic Subsystem	10.0	\$0.0	\$3,589.7	\$3,589.7	10.0	\$0.0	\$3,589.7	\$3,589.7	
113.5	Electrical Subsystem	10.0	\$0.0	\$9,486.5	\$9,486.5	10.0	\$0.0	\$9,486.5	\$9,486.5	
113.6	Subtotal Cost				\$698,161.9				\$707,574.8	
113.7	Reporting Contractor G&A				\$62,057.0				\$68,124.2	
113.8	Reporting Contractor Undistributed Budget								\$0.0	
113.9	Reporting Contractor Management Reserve								\$2,452.0	
	Reporting Contractor FCCM				\$6,124.4				\$7,292.1	
	Total Cost				\$766,343.3				\$785,443.1	
	Reporting Contractor Profit/Loss or Fee				\$70,548.5				\$82,549.4	
	Total Price				\$836,891.8				\$867,992.5	
<p><b>22. REMARKS</b> The data contained in this report is for 10 air vehicles built in Lot 9, which began on June 1, 2015. The final delivery for Lot 9 was made on June 30, 2016.</p>										

DD FORM 1921, MAY 2011

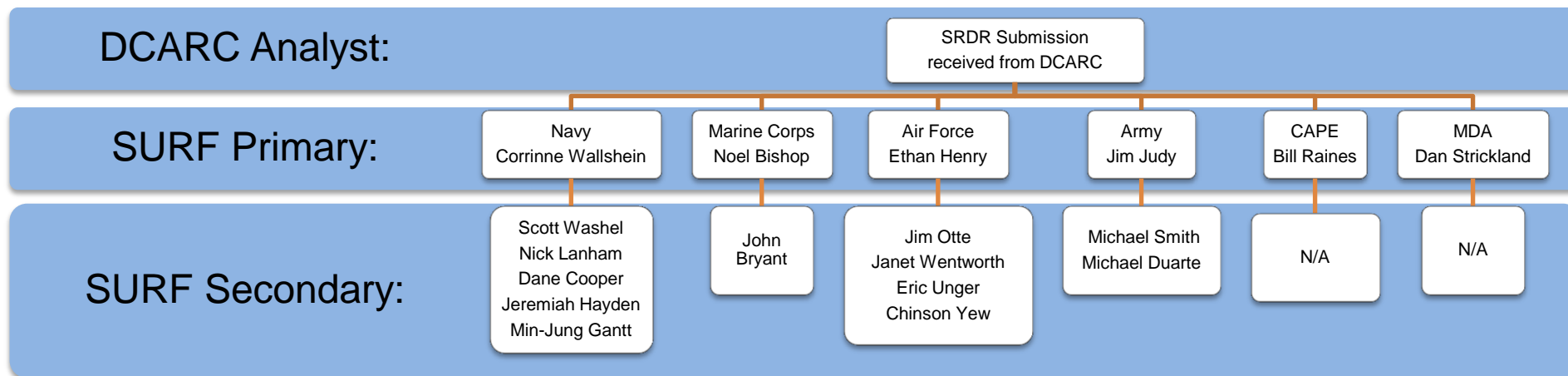
PREVIOUS EDITION IS OBSOLETE.

SECURITY CLASSIFICATION

Unclassified



# SURF V&V Structure



- **Performs pre and post SRDR acceptance Validation and Verification (V&V) with DCARC**
- **Uses a detailed first-ever published joint V&V guide**
  - Training guide used to determine SRDR quality tags for database
- **SRDRs distributed among SURF members to balance workload**



# Collaborative Validation

OSD CAPE

## DCARC:

- Review reports for compliance with the DIDs and Policy (i.e. cost and units are accurately reported)
- Develop the validation error report
- Validates reports using cPet

## Program Office:

- Data reflects entire contract
- Accurate and complete explanations
- Correct data reported for all elements in scope
- Product characteristics and functional breakdown validation
- Correct variant reporting
- Nonrecurring and recurring costs reported accurately

## Service Cost Center/CAPE:

- Provides enterprise wide perspective to ensure consistency across programs
- Ensures data reported provides insight needed to support estimating decisions



# CSDR Validation Summary

OSD CAPE

- CSDRs are validated consistently prior to acceptance in order to populate a robust dataset of historical cost data
- Government Analysts involvement in validation of reports is crucial to receiving quality data

**Quality Data Leads to Quality Analysis!**



# Validation Demo



# CADE Demo



# Round Table Discussion



# Cost Estimating using CSDR Data

OSD CAPE

- You are a government cost estimator preparing an independent LCCE for a MS C decision on a new attack helicopter MDAP program. Answer the following questions:
  - What data would you use to prepare the estimate?
  - How could you apply historical CSDR data to support your estimate?
  - How could CSDRs be more useful to you?



# CWIPT Roles and Responsibilities

OSD CAPE

- An MDAP program that you are responsible for is entering MS B a year from now. Please answer the following questions:
  - Which offices make up the CWIPT?
  - What are the roles and responsibilities of each member?
  - What can you do to ensure an approved plan is included in the RFP?



# CSDR Validations

OSD CAPE

- A final report for an MDAP program that you are responsible for was just submitted to the DCARC. Please answer the following questions:
  - What role do you play in the validation process?
  - What can you do to ensure the data reported is accurate and complete?
  - What tools can you use to help support your validation process?